A Paper on the

Future Role of the Winnipeg Commodity Exchange

for and on behalf of

The Western Grain Marketing Panel

May 1996

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by
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* Mr. Douglas O. Ford served as President and CEO of the Winnipeg Commodity Exchange from 1977 to 1988. He also served as Deputy Chairman and Chief Executive of the Hong Kong Futures Exchange and Chairman of the HKFE Clearing Corporation from 1988 to 1991. One of Mr. Ford's main responsibilities included the complete restructuring of the HKFE and the clearing house, HKFE Clearing Corporation, following a major futures market default on the exchange in the aftermath of the October 1987 world financial crisis.

EXECUTIVE SUMMARY

1.0 BACKGROUND

- *Government Actions: International Trade Agreements*

Since the development of CUSTA and NAFTA in the late 1980s, early 1990s and the recent completion of the latest GATT round agreement, the Federal Government has been endeavouring together with various industry sectors including agriculture to adjust to and comply with the specific trade conditions of these agreements. The common thrust of these agreements is to harmonize cross border trade policies, and to encourage competition and freer trade within Canada, North America and internationally. This is being accomplished by placing more emphasis on and utilization of open market trade principles and relying less on government intervention via subsidization policies and/or restrictive trade regulation to guide industries—particularly in agriculture. The need to reduce the federal government debt also bears on this policy thrust.

Proposed changes to the WGTA transportation policy in order to deregulate/reform transportation in the grain sector announced February 27, 1995 is one important response to this more open trade environment. Examination of the relevancy of the roles of the grain sector institutions such as the Canadian Wheat Board (CWB), the Canadian Grain Commission (CGC) and by extension the Winnipeg Commodity Exchange (WCE) is another important initiative.

- *Grain Marketing Panel: Institutional Review of CWB, CGC and WCE*

The Federal Minister for Agriculture, Mr. Ralph Goodale, initiated this institutional review by appointing the Western Grain Marketing Panel. The Panel is now in the process of examining these institutions (CWB, CGC, WCE) and how various agriculture commodities should be best marketed in the future to foster growth in North American/international trade and further develop value added processing in Canada—all within the context of the CUSTA/NAFTA agreements and the GATT accord.

- *Paper on Future Role of the WCE*

This paper which is on the future role of the WCE will make up a small part of the Panel's institutional review. The Panel has requested that this paper identify gaps within the WCE and open market system generally if grain marketing in Canada is further deregulated—and how these gaps might be closed.

2.0 INTRODUCTION

Potential policy changes by the Federal Government may lead to reduced regulatory control by the CWB in exports of wheat, durum and malt/feed barley. As a consequence,

government/industry focus will likely shift more to the WCE and the open market system from that of the CWB. The shift will depend on the degree to which the Federal Government/CWB relinquishes its control of wheat/barley exports.

Gaps within the open market system in which the WCE and its membership play a key role will no doubt appear as increased demands on the system, due to the potential increased open market trading of wheat/barley, impact on the WCE, its futures contracts and clearing house. Increased open market activity in the form of cash/futures/option trading in wheat and barley will also place greater responsibilities on the federal and provincial regulatory authorities overseeing the WCE.

This paper examines the role of a commodity/futures exchanges and clearing houses generally. It outlines recent developments within the WCE and identifies present/future gaps that must be addressed by the WCE and the Exchange's clearing house, Winnipeg Commodity Clearing Ltd. (WCCL). The paper also identifies regulatory gaps which government authorities, overseeing the exchange, must close.

3.0 ROLE OF A GRAIN FUTURES EXCHANGE

- *Purpose*

A grain futures exchange in the North American context is a self-regulatory association of private members who are associated with or directly involved in the grain business. The exchange is formed to provide organized markets in futures, options and cash grain for the members, farmers and the public.

- *Futures/options/cash markets*

Futures markets perform three important functions for grain merchants and farmers which include price discovery, hedging/risk transference and merchandising. Options are derivatives of futures markets which among other things can also be used for hedging purposes by creating price floors and ceilings using put and call options on the underlying futures contracts. Cash markets relate to the trading of the physical grain by grain merchants at important consumptive export and domestic points.

4.0 ROLE OF A CLEARING HOUSE

- *Purpose*

The clearing house is a fundamental and necessary entity of any futures/options exchange. Its main functions are to account for and to margin all transactions of futures/options contracts traded in the exchange through what is known as the clearing and settlement process.

- *Risk Management and Futures Contract Integrity*

Through the clearing and settlement process the clearing house becomes in effect the buyer to every seller and seller to every buyer or contra-party for all transactions by clearing members on the exchange. The clearing house is able to perform the fiduciary role of contra-party because of the financial integrity of its members, its margining policies/procedures and its own reserve funds available to self insure against exchange/clearing member defaults. In this manner the clearing house maintains/insures the integrity of the exchange's futures/option contracts and makes the standardized futures contracts fully fungible.

5.0 THE WINNIPEG COMMODITY EXCHANGE (WCE) AND WINNIPEG COMMODITY CLEARING LTD. (WCCL)

The full discussion in this paper has outlined in sufficient detail the structure and operations of contemporary futures exchanges and their clearing houses. It has reviewed the important price discovery, hedging/risk transference and merchandising functions that grain futures perform for grain merchants and farmers. The discussion on futures markets has emphasized the paramount fiduciary responsibilities of exchanges, clearing houses and their members. These involve the prudent management and clearing of all futures markets in order to assure the integrity of all futures contracts and, in so doing, to foster public trust and confidence in the market place.

The WCE and its clearing house, WCCL, are structured and perform similar roles as other North American grain futures exchanges and clearing houses. These matters are discussed in the full text of this paper. However, it is important to summarize here the futures/option trading activity on the Exchange together with the recent challenges and initiatives of the WCE/WCCL.

- *Current Futures/Option/Cash Markets*

The WCE currently provides futures markets in feed wheat, oats, feed barley, flax, canola and peas. Options on futures contracts include all the above futures contracts except for peas and oats. There is also a cash call market for canola shipments by farmers to Vancouver. Trading in rye futures ceased in 1994.

Futures trading activity on the Exchange for 1995/96 (see Figure 1) is estimated to reach 3,500,000 contracts in total transactions, 1,700,000 contracts in trade volume and over 100,000 contracts for the yearly high in open interest. Total option trade volume is estimated to be over 81,000 contracts and open interest to exceed 18,500 contracts (yearly high) for 1995/96.

6.0 WCE: RECENT CHALLENGES AND INITIATIVES

The purpose of providing, in this report, fundamental information on the structure and operation of contemporary North American futures exchanges/clearing houses is to bring greater clarity and

understanding of the recent challenges and initiatives with respect to the WCE's administration of its futures markets over the past 10 years. The important challenges here were: 1) the need for the WCE to improve its monitoring/compliance of member floor trading practices due to increased trade volumes and the influx of new floor traders during the early to mid-1980s; and 2) the need for a complete review and restructuring of WCE futures contracts due to expiry problems, particularly in the canola futures, and declining volumes and open interest in its feed grain and rye futures contracts during the early to mid-1990s. These two important challenges for the WCE are summarized further as follows:

- When the WCE commenced its program of automation/computerization and relocation of the Exchange and trading floor facilities in 1978-79, the Exchange was cognizant of the need to improve its monitoring/surveillance of futures trading. With this in mind, the WCE also encouraged the clearing house, WCCL, to computerize its then manual clearing and settlement processes. Computerization of the clearing house was essential in order to achieve not only greater clearing efficiency but also to facilitate the monitoring of member futures positions utilizing computerized records and monitoring programs. The eventual computerization of both the WCE's trading floor and the WCCL's clearing and settlement processes in the early 1980s allowed the WCE and the supervisor of the Grain Futures Act to better monitor futures trading practises/activities of floor brokers and trading firms. This improved surveillance/monitoring capability of futures trading resulted in the WCE disciplining a few members for improper trading practises. As a result of this action the WCE found it necessary to make a complete review and revision of its futures trading rules as well as to improve the training for new floor traders.

- The need for review/restructuring of the WCE's futures contracts was brought on by futures contract expiry problems and the declining trade volumes and open interest in its feed grain and rye futures contracts. The need for revamping the canola futures contract was particularly apparent because the delivery threat against the canola futures contract had become emasculated by regulatory control of transportation and commercial impediments to futures delivery. These impediments allowed the futures contracts to become vulnerable to congestion and even manipulation. As a result, canola futures prices and price relationships in the 1994 June expiry would not converge or even bear a relationship with Vancouver cash prices. The June canola futures contract could no longer serve its main functions of price discovery and hedging which led to the necessity for WCE intervention. In fact, the June canola futures contract had become a liability to hedgers who could not delivery against their short futures positions. The 1994 June canola expiry problems signalled the need for revamping the futures contract.

The background information on the structure and operations of futures exchanges/clearing houses also creates an important reference by which the preparedness of the WCE/WCCL to meet the future challenges can be measured in the event of a federal government deregulation of export wheat and barley. A review of recent WCE challenges and how the WCE has met these challenges also assists in measuring the WCE/WCCL readiness.

• The WCE has introduced the necessary changes to its trading rules and regulations to foster orderly and competitive futures/cash markets on the exchange. Appropriate rules and regulations regarding membership classification and associated capital requirements for members are also in place. Moreover, monitoring the compliance of these rules/regulations by members is ongoing and diligently pursued by the WCE compliance staff.

• The WCE has implemented the state of the art monitoring and surveillance system to monitor trading activity and to ensure member compliance of the trading rules which are designed to maintain orderly, open and competitive futures trading on the floor.

• The WCE has embarked on an ambitious program of reviewing futures and restructuring all of its futures contracts in order that the revised contracts meet the price discovery/hedging needs of its membership and that of the farm community. This program, while not yet fully completed, is now showing positive results with respect to increased trading volumes and the return of trader confidence represented by growing open interest. The main changes to the futures contracts have been the introduction of the warrant/delivery certificate FOB delivery mechanism and allowing for the delivery of uncleaned grain and oilseeds. These positive changes inherently increase the threat of delivery against future contracts and will no doubt improve the cash/futures relationship and eventual convergence upon futures contract expiries.

The futures contract restructuring program also included the relocation of par price reference points from Thunder Bay and Vancouver to interior locations for flax and canola. The relocation of the par reference point for the canola contract in particular was questionable however. Some market participants and farm commodity associations did not see the necessity of such a major change before observing the benefits arising from the introduction of the new delivery mechanism and more latitude in uncleaned deliverable grade specifications. Time will tell as to the wisdom of relocating the par reference point for canola, particularly as applies to striking the necessary balance between the competing export and domestic markets for canola. (See Appendix Items 12 and 13.)

As stated earlier, this discussion of problems (which the WCE has addressed in a reasonably, satisfactory manner within the regulatory and commercial limitations of the Canadian grain industry), assists in the understanding of the functions and operations of futures markets. The discussion also serves to identify the potential gaps within the WCE if open market grain trading is further expanded to include export wheat and barley. This assumes of course that the regulatory controls of the CWB over export wheat and barley trading are relaxed or relinquished altogether.

7.0 POTENTIAL GAPS IN THE WCE OPEN MARKET SYSTEM

A number of gaps will need to be addressed with respect to the WCE/WCCL and government regulation/regulators of the Exchange. This will be particularly important in the event of export wheat and barley deregulation which may result in futures trading reaching an estimated 15 million contracts per year on the WCE within five years. This trade potential is 4 or 5 times greater than the WCE's present volume and open interest. The WCE's current trade statistics are illustrated in Figure 1. These gaps are in four main areas: 1) wheat/barley futures contract design, 2) WCE administration assessments, 3) WCE/WCCL risk management assessment and coordination, and 4) government regulation. The gaps are explained further below:

- *Wheat/barley futures contract design*

It will be necessary for the WCE to develop both a wheat and barley futures contract that will efficiently discover and make transparent Canadian wheat/barley prices in competition with world markets. The contracts must also provide an effective risk transference/hedging and merchandising facility for domestic and export market participants.

These contracts must be both technically sound, and highly liquid in order to attract large Canadian and international players. These new wheat and barley futures markets will need to be competitive with and as liquid as the wheat/barley futures markets trading on the MGE and the wheat futures on the KCBOT and CBOT. Here arbitrage/spreading agreements with these U.S. grain exchanges will enhance trading activity on the WCE new wheat and barley futures markets and may preempt direct competition from the MGE/KCBOT or CBOT.

- *WCE Administrative Assessments*

The potential introduction of these new contracts and the resulting impacts of large trading volumes will require the WCE to make a number of assessments regarding the administration of the markets and self regulation of its membership. These assessments among others will entail focussing on the adequacy of the WCE's trading floor systems and facilities, monitoring/surveillance systems, staffing and floor trading training programs, membership capital requirements and impacts of transportation deregulations on cash/futures markets.

- *WCE/WCCL Risk Management Assessment and Coordination*

A critically important assessment will be on the WCE/WCCL's ability to monitor and effectively clear and settle the increased trading volumes in order to maintain the integrity of the WCE futures/option contracts. Here, the WCE and the WCCL will find it necessary to review their risk management policies practices and procedures and find ways to better coordinate these matters between them. This might include the introduction of interlocking directorships on the two boards. This risk management audit will be essential to assure the WCE and others that the WCCL can continue to assume the risk and fiduciary responsibilities as contra-party in the event of sharply high volumes arising from export wheat/barley trading on the WCE.

- *Government Regulation/Regulators of the WCE/WCCL*

There will be a need for the federal and provincial regulatory authorities to assess the adequacy of the present regulatory machinery to effectively oversee the WCE/WCCL and futures trading generally. This review is now in process and hopefully will incorporate: the need for federal/provincial harmonization of regulations/regulatory requirements; encompass futures trading in all commodities including grain that might be traded on the WCE and; allow for technical hearings/appeals on futures contract design and delivery specifications for market participants including farmers.

Moreover, the act that regulates futures trading and futures exchanges/clearing houses should be a federal statute—perhaps administered by a joint commission of federal and provincial designates with one administrative body that oversees the WCE. This will maintain the international status of a federally regulated futures/option exchange for the WCE. It will provide greater facility to harmonize futures trading policies and regulation within Canada and between Canada and other jurisdictions particularly the United States.

8.0 CONCLUSIONS

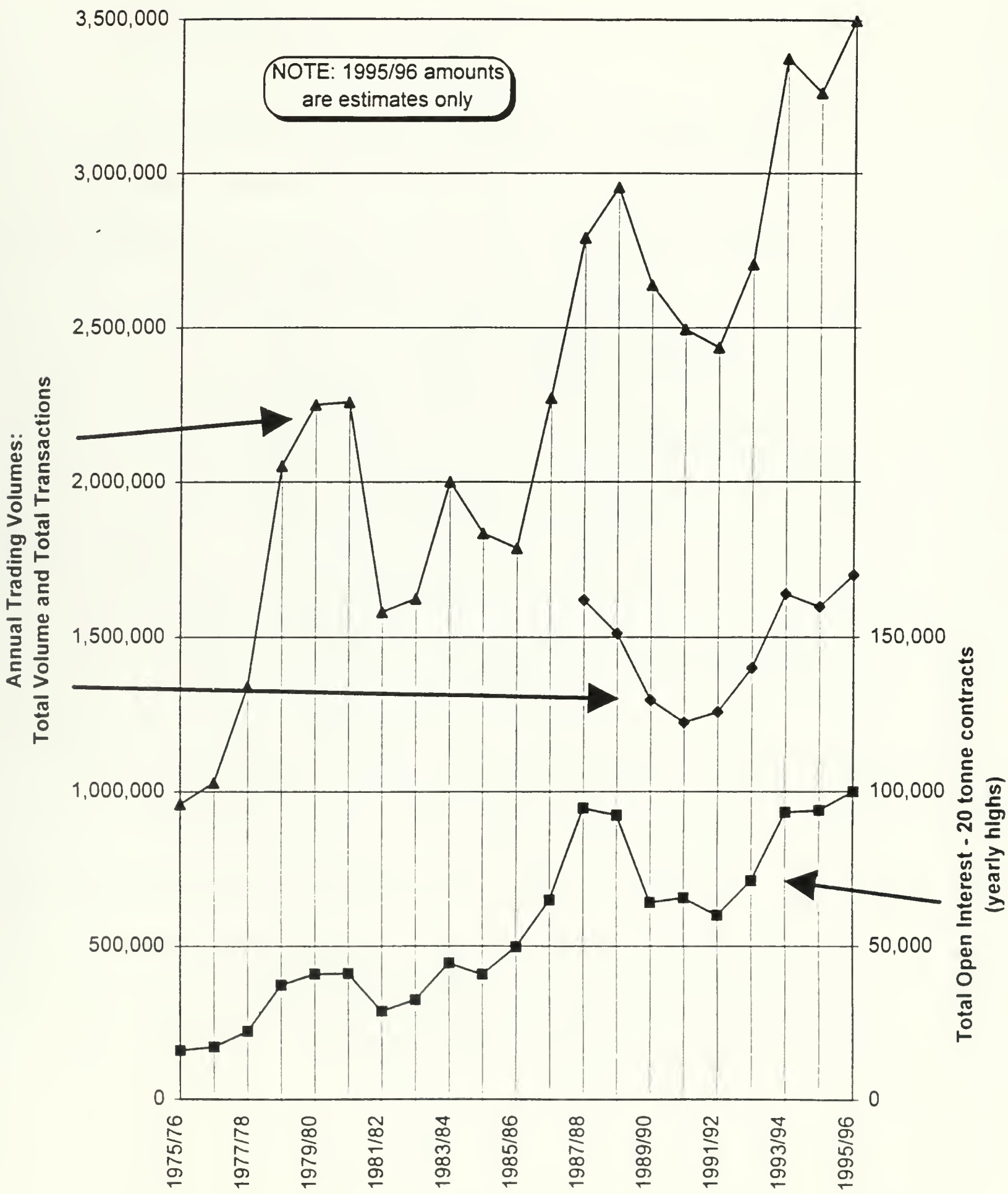
At present, the Winnipeg Commodity Exchange is capable of meeting the expanded responsibilities and opportunities that may arise if the federal government decides to deregulate wheat and barley marketing in whole or in part. However, like all exchanges the WCE has weaknesses regarding the lack of liquidity or "thinness" in some of its contract markets. This liquidity problem is being addressed by the Exchange to the extent that is currently possible. Government deregulation of transportation and now possibly grain marketing in export wheat and barley will assist the WCE's efforts in this area immeasurably—because the liquidity issue in WCE's futures trading is also a function of regulatory control of export wheat and barley marketing and grain transportation.

No doubt, there will be growing pains as the Exchange and its members address the impacts of any major structural change to the Canadian grain industry such as the potential further deregulation of the wheat and barley marketing. Moreover, if there is to be open market trading of export wheat and barley, the WCE/WCCL will require sufficient lead time to address the gaps identified in this paper particularly in the areas of: wheat and barley futures contract design, WCCL's clearing and settlement policies and procedures, any regulatory futures contract approval requirements, and WCE marketing/education efforts to promote the contracts, among others.

In all of this the WCE in the institutional sense must not become complacent or arrogant. Its role is both a commercial and public one and in fulfilling this role the WCE must balance the interests of the industry; exporters, domestic processors and farmers. Its futures, options and cash markets must also be balanced, accessible and transparent to all market participants including the farmers and the general public. Above all else, the Exchange, the clearing house and the members must fulfil their paramount fiduciary responsibilities which are to assure the integrity of all the Exchange's contract markets and in so doing to foster trust and confidence in the WCE as an important marketplace for the Canadian grain industry.

FIGURE 1

Winnipeg Commodity Exchange
Total Transactions, Volumes and Open Interest
1975/76 to 1995/96



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3.0 ROLE AND STRUCTURE OF THE GRAIN FUTURES EXCHANGE

- *Purpose*

A grain futures exchange in the North American context is a self-regulatory association of private members who are associated with or directly involved in the grain business. The exchange is formed to provide organized markets in futures, options and cash grain for the members, farmers and the public.

- *Futures/options/cash markets*

Futures markets perform three important functions for grain merchants and farmers which include price discovery, hedging/risk transference and merchandising. Options are derivative of futures markets which among other things can also be used for hedging purposes by creating price floors and ceilings using put and call options on the underlying futures contracts. Cash markets relate to the trading of the physical grain by grain merchants at important consumptive export and domestic points.

- *Governance*

Governance is normally through an elected board of governors/directors largely made up of members with some non-member directors representing the "public interest". An administration staff implement the policy directives of the board. Standing technical committees appointed by the board as well as ad hoc committees assist the board and the administration in managing the affairs of the exchange. Government regulatory authorities recognize and oversee futures exchanges as self-regulatory organizations (SROs) to ensure that the public interest is both served and protected.

- *Rules of Trade*

The exchange establishes rules of trade to provide competitive, fair and open access to its cash/futures markets, sets minimum capital requirements to assure the financial integrity of its members and determines margin policy/margin levels for members' participation in futures and options trading.

Margins are a form of performance bond that exchange members with open futures positions must maintain on a current status to ensure that members will honour the obligations of the futures contracts and thus maintain the integrity of the contracts.

- *Trading Floor*

The Exchange provides and administrates a trading floor with associated electronic computerized facilities where futures/option contracts are traded between members on behalf of themselves, other members, non-members and public investors. Trading is supervised by an exchange staff to monitor compliance with the trading rules and to capture the trades and prices discovered by the open outcry trading process on the trading floor.

The exchange reports and electronically disseminates from its trading floor all relevant cash/futures/option prices, information and associated trade volumes/open interest statistics emanating from trade in its futures/option contracts. It also brings to the trading floor relevant market information and live price quotes from other North American/international futures/cash markets for comparison and arbitrage purposes.

- *Development and Education*

The exchange is responsible for developing new futures/option contracts, modifying old existing ones on behalf of its members. It also educates potential users, the public and governments on the economic value and need of futures/option markets for grain commodities.

4.0 THE ROLE AND STRUCTURE OF THE CLEARING HOUSE

- *Purpose and Structure*

The clearing house is a fundamental entity of any futures/options exchange. Its main functions are to account for and margin all transactions of futures/options contracts traded on the exchange through what is known as the clearing and settlement process.

Through the clearing and settlement process the clearing house becomes in effect the buyer to every seller and the seller to every buyer or contra-party for all transactions by clearing members on the exchange.

The clearing house is able to perform the role as contra-party because of the financial integrity of its members, its margining policies and its own reserve funds available to self-insure against exchange/clearing member defaults. As such the clearing house maintains/insures the integrity of the exchanges futures/ option contracts and makes the standardized futures contracts fully fungible (i.e., a buyer or seller can look to the clearing house, through any clearing member, to offset their positions with rather than having to return to the actual member with whom they made the original trade).

- *Governance*

The clearing house can be structured to be a department within an exchange or can be separately incorporated and either independent from or controlled by the exchange. Governance of a clearing house is performed by a board of directors if the clearing house is a separate corporation or through a governing committee if the clearing house is an exchange department. Operational policies and procedures of the clearing house are implemented by the clearing house's administrative staff.

- *Membership; Fiduciary Responsibility and Risk Management*

All clearing houses are composed of clearing members who also must be members of the exchange for which it clears. However, not all exchange members are members of the clearing house. Only clearing members can clear futures/option trades either for themselves and/or on behalf of other exchange members on an exchange with which the clearing house has a clearing arrangement and settlement responsibilities.

Clearing members not only assume the fiduciary risk of their own trading and those trading through them, but also those of other fellow clearing members in what can amount to billions of dollars of grain futures/options traded daily. Hence the need for well financed clearing members backed by sound risk management practises and margining procedures that must be followed by

both clearing members and the clearing house. In addition the clearing house has its own capital reserves/guarantee funds to self-insure against potential member defaults.

5.0 DESCRIPTION OF CLEARANCE AND SETTLEMENT SYSTEMS

There are two major components of the clearing and settlement process; an operational component and financial component. The operational component of clearance systems involves the computerized processing of trade data. The financial component of settlement systems focusses on collecting the monetary value associated with trades and monitoring the financial integrity of firms (clearing members) that interface directly with clearing houses.

5.1 Operational Components of Clearance Systems

The operational components of clearance systems can be divided into three primary functions: 1) Trade entry or trade capture, 2) Trade matching or trade comparison, and 3) Trade registration or trade clearance.

5.1.1 Trade Entry/Trade Capture Systems

Trade entry is the process of capturing the trade information from the trading floor. Trade information usually includes the (1) buy and sell broker, (2) buy and sell firm, (3) whether the trade is for a customer or proprietary account (futures and options), (4) instrument being bought and sold, (5) quantity, (6) price, and (7) time of execution. If an exchange has an automated trade execution system, trade information is usually transmitted directly to the clearing houses' computer systems from the exchanges' execution systems. The efficiency of trade data entry/trade capture systems is critical to the speed and efficiency of the entire matching and clearing process.

5.1.2 Trade Matching/Trade Comparison Systems

Trade comparison is the process by which certain trade information must match to officially register the trade. Matching criteria are different throughout the various markets. At a minimum all trade comparison systems match on (1) buy vs. sell, (2) price, (3) quantity, and (4) security, commodity, or financial instrument.

5.1.3 Clearing Processing/Trade Registration Systems

Clearing processing begins after the final reconciliation of unmatched trades. Clearing processing can be described as the computer system that combines matched trades with existing open positions held by each clearing member to calculate the new number of open positions. Trade

registration is the system that interposes the clearing house as the "contra-party" to each clearing member's open positions. At the point a trade is registered, the clearing house becomes the "party to every trade" carried at the clearing house and is responsible to the other members if a clearing member fails.

5.2 Financial Component of Settlement Systems

The second major component of the clearing and settlement process is financial. The financial component of settlement systems is the process whereby clearing houses settle the monetary value associated with trades and monitor the risks of clearing members that interface directly with clearing houses. The financial component of settlement systems is the familiar fiduciary responsibility that clearing houses assume as the guarantor of trades among clearing members. At the time the guarantee is effective, the clearing house becomes the opposite party to every trade at the clearing house, substituting itself as the buyer to every clearing member seller and the seller to every clearing member buyer.

The four major issues involved in the financial component of settlement systems are policies regarding (1) settlement payments and variation margin collection, (2) initial margin requirements and their calculation procedures, (3) risk management information systems necessary to monitor the financial integrity of clearing members, and (4) guarantee funds and assessment powers in the event of a clearing member default.

5.2.1 Settlement Payments and Variation Margin Collection

Settlement payments refer to the final payment of funds to and from clearing members from and to the clearing house for trades registered up to a specific point in time. In the futures markets the settlement payment made in the morning on the day after the trade date is really more in the nature of a final variation margin. Variation margin refers to settlement payments, other than the final settlement payment, that a clearing house may call to reduce the magnitude of the final settlement payment. In the futures markets variation margin and settlement payments are also known as "marking to market."

Daily settlement in the futures markets significantly improves the financial integrity of the clearance system. As prices move up or down either the holder of the short or long position loses money. Since the clearing house guarantees only matched trades all positions at the clearing house are perfectly symmetrical, i.e., for every long contract there is an offsetting short contract. By marking each position to the current market price every day, the clearing house collects funds each day from clearing members with losses to prevent any losses from accumulating. These funds in turn are in effect transferred to those clearing members with gains in their futures positions.

5.2.2 Initial Margin Requirements and Calculation Procedures

There are various ways that margin requirements are calculated and the financial and capital standards employed for clearing membership. The two most important policy issues are (1) whether the clearing house margins are on a "net" or "gross" basis, and (2) whether the clearing house calculates initial performance margin deposits using sophisticated "portfolio-based" simulation models or simply a dollar margin per contract times the number of contracts held.

- *Calculation Methods for Initial Margin Deposits*

Two different methods are generally used for calculating initial performance margin deposits at clearing houses. The simple method is to multiply the number of positions or contracts, e.g., futures and futures-options contracts, by a specific margin amount per contract or a specific percentage of the dollar settlement exposure to arrive at the initial margin deposit required by the clearing house. Using this method, futures-options are typically margined separately from their underlying futures contracts, which may cause margin levels to be unrelated to a position's economic risk.

The second more sophisticated methods is to calculate initial performance margin deposits using a portfolio-based simulation model. These models combine all related positions into a portfolio. Price, volatility, and other risk factors are simulated to determine their impact on profits and losses in the portfolio. The clearing house establishes parameters to collect initial margins based on the simulated losses of portfolios under various scenarios.

5.2.3 Risk Management Information Systems

Initial margin deposits held by clearing houses on behalf of clearing members provide the first and most important line of defense against a default. The second line of defense is the level of capital required of clearing member firms. Minimum capital requirements vary between clearing houses. Some clearing houses may require substantially more capital based on actual trading volume, open positions and other business activities. Several additional lines of defense employed by clearing houses include (1) customer position limits, (2) large customer reporting systems, (3) capital-based position limits, and (4) sophisticated risk analysis programs.

5.2.4 Guarantee Funds and Assessment Powers

All clearing houses in the United States have guarantee funds, clearing funds, or committed lines of credit to use in the event of a clearing member default. Most clearing houses have explicit assessment powers (also known as mutualization of risk). Through exchange or clearing house rules and regulations these assessment powers enable a clearing house to call (assess) each clearing member for a specified amount of funds, based on various formulas typically related to

a clearing firm's past trading volume and/or open positions, to cover the monetary loss to the clearing house resulting from a clearing member default.

- *Guarantee or Clearing Funds*

The most significant question related to clearing funds is what level (amount) of funds is appropriate or sufficient to protect the clearing house and the financial integrity of the marketplace if a clearing member defaults. Obviously the greater the amount of clearing funds the greater is the ability of a clearing house to pay for losses arising from a default. But the costs of establishing and maintaining clearing funds is integral to the viability of a marketplace. If each clearing house maintained a clearing fund of, for instance, one billion dollars, the clearing house would have more money to pay for losses in the event of a default, but the probability of a default would not decline simply because higher clearing fund deposits are required. Therefore, although the amount of available funds has increased, the costs of participating in that marketplace would be significantly greater. Consequently there is a definite trade-off between the amount of clearing funds necessary to foster public confidence in the marketplace and the explicit costs of participating in that marketplace.

As discussed previously, all clearing houses employ a wide variety of systems and procedures that seek to reduce to an absolute minimum the probability of a default. The systems and procedures used by the BOTCC[1] for example include (1) extensive review of potential new members before selective admission is granted, (2) initial margin deposits based on market volatility calculated using sophisticated simulation models, (3) at least twice-daily marking-to-market through variation margin calls, (4) high minimum capital requirements adjusted on the basis of a clearing member's customer and proprietary positions, trading volume, and other business activities, (5) extensive simulations of proprietary and customer risk arising from concentrated positions relative to the clearing member's capital, and (6) the authority to issue "super" margin calls to individual clearing members that carry concentrated customer and/or proprietary positions representing the potential significant depletion of a clearing member's capital. In the futures markets, clearing houses do not permit losses to accumulate; all losses are settled no later than the morning immediately following the trading day. As a result, the maximum potential default liability represents only one business day's market movement.

These various lines of defense employed by the clearing house are so complete that, for a one-day market movement to cause a clearing house failure, that one-day market movement would have to deplete (1) a customer's entire initial margin deposit at the clearing firm, (2) the customer's entire capital base, (3) the entire capital of the carrying clearing member and in some instances

[1] BOTCC—The Board of Trade Clearing Corp of Chicago is the largest clearing house in the United States. It clears for the largest futures/options exchange i.e., the Chicago Board of Trade.

the entire net worth of the "parent firm" and individual stockholders that own the clearing member, (4) the entire initial margin deposit held at the clearing house, which could only occur if the clearing house had permitted a clearing member to carry such a large concentrated position, and (5) the entire resources (clearing funds) available to the clearing house. It is an extremely small probability of occurrence that all of these events will happen.

All of these lines of defense are not to suggest that the total value of a clearing fund is not important. Rather, the important point is to recognize that the all-encompassing systems and procedures employed by the various clearing houses are directed at minimizing the possibility of a default and therefore maintaining/assuring the confidence of market participants, the public and government on the integrity of the exchanges futures/options markets.

- *Assessment Powers or Mutualization of Risk*

In addition to clearing or guarantee fund deposits most clearing houses have assessment powers if a default depletes all other available resources. Some clearing houses have limited assessment powers, i.e., a clearing member may be assessed for only a fixed dollar amount, for example, $10 million. Other clearing houses promote their assessment powers as "good to the last drop." The ultimate issue is whether assessment powers represent as effective method of protecting the clearing house from a default or whether unlimited assessment powers may in fact weaken the financial integrity of the clearance system.

Conceptually the potential of excessive assessment powers particularly unlimited assessment powers mutualize the costs arising from a default by requiring all clearing members to share in paying for losses. Wide assessment powers may tend to encourage excessive risk-taking by clearing members in the sense of "heads I win, tails we all lose." Most clearing houses do in fact have regulations limiting the clearing house's assessment powers to that of only replenishing the clearing/guarantee fund back to its original level prior to a default. But what if the losses are greater than the total clearing fund deposits of all members?

If multiple failures of a number of clearing firms take place (either through exchange and/or non-exchange related business activities of members) during a widespread market debacle causing losses of several hundred million dollars, unlimited assessment powers become irrelevant. It is highly improbable that the remaining clearing firms, whatever number that might be, would permit themselves to be assessed for such losses. Those remaining clearing firms would "call their lawyers, not their bankers." A long and costly court battle would follow. Even if only one firm failed to pay an assessment the entire situation would likely end up in court. But more importantly, if the clearing house is unable to collect all assessed funds immediately, payments and contracts would be in default. The clearing house would have failed, and the exchange and its marketplace would probably no longer exist. If the exchange did continue to exist, clearing would have to shift to another clearing house or a new clearing house would have to be organized

to take over clearance functions. In effect the size of the losses will determine whether assessment powers are an effective method for protecting the financial integrity of the marketplace, not the fact that regulations merely exist on the books giving the clearing house the right to assess. At some high level of losses, assessment powers would be ignored. The underlying causes of the failure of one firm or a number of firms would have to be examined to determine the effectiveness of such assessment powers.

In reality assessment powers may not necessarily strengthen the financial integrity of the clearance system. If a default causes losses that are significant, regardless of whether the default originated from positions carried at a clearing house or from other business activities, the remaining clearing members will decide whether the continued viability of the exchange or clearing house is worth the cost of paying the assessment. If not, remaining clearing members will simply "walk away" from paying any assessments and failure to collect all assessed funds immediately would doom the exchange or clearing house. In the final analysis, assessment powers may be effective for relatively small default losses, but the major clearing houses already have explicit resources available to cover such losses. Consequently the peculiar anomaly is that assessment powers may be effective, but only to the extent they are **not** needed, and where assessment powers are needed they would **not** be effective. Similar to gross position margining, clearing houses' assessment powers appear to be more of a "public relations" concept rather than a real financial strengthening of the systems for clearance and settlement.

6.0 FUTURES CONTRACTS: DEFINITION AND FUNCTIONS

The above description has outlined what a futures/option exchange and clearing house are, their functions and how they operate. The following now defines the actual futures contract, which futures/option exchanges/clearing house administrate and clear, as well as their purpose and function.[2]

6.1 Definition of a Futures Contract

Futures contracts for agricultural commodities are normally deliverable contracts that not only reflect existing spot prices today but also forward prices up to 24 months or longer. Each future contract is specified as to what, where, how and when. That is the futures contract has predetermined specifications as to what is to be traded (e.g., wheat, canola), the par pricing delivery point or basis and any alternative delivery points, the deliverable grades and at what discounts or premiums, the delivery months and deliverable instrument (warehouse receipt or

[2] Note options are derivatives of future contracts. This discussion, however, will be limited to that of futures contracts only.

delivery certificate), contract size to be delivered (number of bushels or tonnes if a grain), the first and last delivery day.

All that remains is the determination of prices for futures contracts for any particular delivery month. These prices are determined daily by a competitive open outcry trading or auction system of buying/selling activities by exchange members of futures contracts on the trading floor of an exchange.

A buyer of futures contracts is considered to be "long futures" by virtue of holding an open long futures contract position originally bought on the floor of the exchange and registered by the clearing house. If the buyer holds the long position until contract maturity he/she must take delivery of the quantity and grade specified in the contract at the price at which the contract was originally bought and cleared. The seller of futures contracts is considered to be "short futures" by virtue of holding an open short futures contract position originally sold on the floor of the exchange and registered by the clearing house. If the seller holds the short position until contract maturity, he/she must make delivery of the quantity and grade specified in the contract at the price at which the contract was originally sold and cleared.

If either the "long" or "short" does not wish to hold their respective positions until maturity or delivery of the contract they can "offset" their positions registered in the clearing house by making an equal but opposite transaction on the floor of the exchange. In this manner, their open long or short positions are made "flat" which removes the obligation by the long or short to take or make delivery (at contract maturity) of the actual commodity (grain or oilseed) against the long or short futures contract positions which have now been offset or made flat.

Any price differences between the original price at which the futures contracts (long or short) were registered in the clearing house and the price when the positions were offset would be covered by variation margin deposited at the clearing house. If the price difference was negative, the clearing member's account would be debited, If positive the account would be credited by the clearing house. This offset trading and price differential adjustments are made possible because the clearing house is the contra-party to all matched long/short transactions/positions registered by the clearing house—making the futures contract fully fungible.

6.2 Threat of Delivery

It is important that futures and cash prices relate to each other in some ongoing predictable basis or relationship to each other and converge upon futures contract maturity. This is accomplished by allowing for actual delivery of the physical commodity or grain against the futures contract. In order for a futures contract to have its prices converge with cash prices at contract expiry and thereby be a feasible hedging medium, it is essential that delivery of the underlying commodity in satisfaction of a short position be a viable option. This alternative permits the short the choice

of offset or delivery thereby requiring the long on the other side either to offset or accept delivery at a price reflecting futures, and cash market values. Economic literature on futures markets refers to this necessary requirement for a properly functioning futures contract as the "threat of delivery".

Threat of delivery is a fundamental form of cash/futures arbitrage and trading discipline in a delivery based futures market. It is designed to ensure that futures prices and the underlying cash values will track together in some predictable relationship or basis and ultimately will converge at contract maturity or expiry. If this does not occur the futures market may no longer adequately reflect or be depended upon to reflect the cash market for which it is designed. Moreover the futures prices may no longer be unbiased forecasts of eventual spot prices.

Unpredictable cash/futures basis and lack of cash/futures convergence severely limits the use of the futures markets as a reliable market for price determination, hedging and risk transference. In the extreme, particularly under high price volatility, caused by situations of price distortion the basis risk can exceed the flat price risk for hedgers. This can adversely lead to significantly higher transaction costs and actual pecuniary losses to hedgers who cannot delivery their hedged stocks due to delivery restrictions.

A lack of a realistic delivery threat which leaves the market vulnerable to manipulation and price distortion also may lead to a misallocation of resources and a general loss of confidence by market participants in the integrity of the futures market.

6.3 Futures Prices: biased or non-biased forecasters of spot prices?

When there is more futures buying pressure than futures selling pressure or when futures deliveries by shorts are limited relative to longs wishing to take delivery, the futures will generally trend upwards as the delivery period approaches and during the delivery month. If cash prices follow this upward trend of the futures prices to the same degree and there is cash/futures convergence, then there is no cash/futures bias. The future prices are unbiased forecasts of eventual spot prices. Both long and short hedgers will not be materially affected by this price action—assuming that short hedgers are free to delivery.

If, however, futures prices rise prior to and in the delivery month without a corresponding rise in cash values over the same period of time, then a bottleneck or restriction (and possibly manipulation) is occurring within the delivery period. In this scenario, futures prices become biased forecasts of the eventual spot prices. This biased price behaviour benefits the long position holders (hedged or not) to the detriment of the shorts. The short hedgers will find their hedges less effective and costly overtime because of the adverse basis change in their hedged positions. The loss in their short futures positions would not be offset by a corresponding rise

in the value of their cash positions. Consequently the shorts will be inclined to delivery against their futures positions if they elect to hold their positions into the delivery month.

In the extreme particularly if for some reason the shorts are restricted from making delivery (or don't wish to make delivery) and technical cash/futures convergence does not result, the short's hedging costs (losses) can mount dramatically. The shorts would be forced to offset (tradeout) their futures position thereby incurring further pecuniary losses over and above their basis losses. The degree of their losses will depend on the degree of bias in the futures prices relative to the cash prices reflecting the lack of cash/futures convergence.

To maintain their hedged position the shorts may be forced to "roll the hedges" forward to the next delivery month (usually by buying the spread which offsets their short position in the cash month and establishes another short position in the next deferred month). If the next futures contract month is at negative carry to the spot month (reflecting in an inverted futures market in which the spot month is higher priced than the deferred months) the short hedgers will likely incur further hedging losses.

The opposite futures bias can also occur in which futures price forecast of eventual spot or cash prices in biased downwards in favour of the short open interest. In this case long hedgers would find their hedges less effective over time and even cause actual losses. Therefore depending on their forward cash sales position, the long hedgers would have a tendency to stand for delivery. Again the degree of the short bias would affect the effectiveness of their hedged positions.

It is self evident that if the last two scenarios regarding biased futures prices occur in a serious way and with chronic regularity then confidence in the futures market by participants will be lost. The futures markets will no longer perform its price discovery, hedging, and merchandising functions in a commercially acceptable manner.

6.4 Purpose and Functions of Futures Markets

There are three main functions of futures markets: price determination/discovery, hedging/risk transference and merchandising. These are outlined as follows:

- *Price Determination/Discovery*

Futures prices determined on an exchange trading floor must be closely linked to current and forward values in the underlying cash market as derived from the competing demands of both domestic and export markets in relation to the common supply on farm and in the commercial system.

In this manner futures prices will then provide the combined functions of clearing the market and rationing/allocating tight supplies between the various export/domestic consumptive markets in the nearby and deferred time periods.

The closer the futures represent significant pricing/consumptive points in the commercial stream in the underlying cash markets the better the price determination/discovery function. It is at these points that the competition for supplies is the greatest for both the longs and the shorts thereby minimizing price bias in the market.

- *Hedging/Risk Transference*

Hedging using grain futures markets allows the grain merchant to offset his flat price risk which is assumed either by owning physical stocks without a corresponding "home" or sale of these stocks ("long cash") or by making a forward sale of cash without a corresponding ownership of stocks to satisfy the sale ("short cash"). To hedge these two cash positions, long cash or short cash, the grain merchants either sells a corresponding amount of futures contracts (goes short futures) or buys a corresponding amount of futures contracts (goes long futures) respectively and in so doing exchanges a flat price risk with a smaller more manageable cash/futures basis risk. The basis, which is the difference or spread between the cash and futures price at the time of placing the hedges, may change over the life of a hedged position but the variation will normally be small and predictable. In some cases the basis may not change or the risk of the basis changing (basis risk) can be fixed or predetermined.

There are two forms of hedging; short hedging and long hedging.

- *Short hedging*

Short hedging involves the selling of futures contracts by the grain merchant equal in quantity to the tonnage of stocks (cash), the grain merchant who is now a "short hedger" owns instore some storage facility. Therefore if the price of the cash stocks falls, the loss in value of the cash will be offset by an equal gain in the hedger's short position. On the other hand, if prices rise the increase in value of the hedger's cash position will offset the losses in the hedger's short future position. This assumes of course that the canola future price/cash price basis remains the same during the period in which the grain merchant is hedged.

- *Long hedging*

Long hedging is the opposite to short hedging. In this case a grain merchant who has made a forward short cash sale of canola, will hedge that cash sale by buying an equal amount of long canola future contracts. The grain merchant now a "long hedger" will hold this position until he has sourced sufficient canola stocks to satisfy and delivery against his short cash position or

contract. The long hedger is now price protected because any changes in cash prices will be offset by the hedger's long futures position and vice versa.

To make hedging more effective, the futures contract should be designed to capture as much of the flat price risk of the commodity in the futures price as possible. This should (theoretically) make the cash/futures basis and the basis risk small compared to the flat price of the cash.

Cash/futures basis levels at alternative delivery points or areas away from the main pricing point reflect transportation and other transaction costs (brokerage fees etc.) in trading the commodity including local demand/supply discounts or premiums. The actual basis, which may vary, may take in all, part or none of the transportation costs to move the commodity from the alternative point to the main pricing point.

In other words, in a well functioning mature futures market the premiums or discounts to the futures at the alternative delivery point or area will be a reflection of the local demand/supply conditions relative to the demand/supply conditions at the main pricing point whether it be for nearby or deferred positions.

- *Cash/Futures Arbitrage/Delivery or Merchandising*

A realistic threat of delivery based on integrity of supply will ensure that the futures and the underlying cash values will track together and converge on contract maturity. If cash prices in the futures month are at a discount to futures, cash will be purchased, futures contracts sold and the delivery of cash made against the short positions. On the other hand if cash were at a premium to the futures, long futures positions would be established and held for delivery.

The delivery mechanism should be relatively simple and easily accessed so that just the threat of delivery without necessarily effecting delivery is sufficient to keep the cash/futures prices in line. Futures market mechanisms, particularly the delivery function, should be so structured and price efficient that market participants, both longs and shorts, are equally indifferent between receiving or making delivery. Traders will then be more confident about trading in the cash month which will result in greater liquidity in the nearby months, much improved cash/futures arbitrage possibilities, and more effective hedges. This will lead to market participants having greater confidence in the futures market so that they will trade their cash basis exchange of futures rather than taking or making delivery.

- *Inter-Month Spreading or Merchandising*

Spreading is an important and necessary form of price arbitrage. It involves the simultaneous buying and selling of different futures contract months. This trading activity has the effect of determining carry costs from one contract month to another. Higher and lower carry costs have

the effect of reflecting the market needs for farmer and commercial supplies to be moved forward to consumptive pricing points.

Locking in these carry costs spreads also allow the grain merchandisers to "carry" or finance stocks in the commercial stream from one period to the next.

Nearby inter-month spreads or carry costs should reflect a strong correlation with cash/futures basis in well-functioning mature futures markets. This is the reason why spread trading is so closely linked and inter-related with cash trading and hedging.

7.0 THE WINNIPEG COMMODITY EXCHANGE (WCE)

• *WCE Role, responsibilities and organization*

The WCE founded in 1887 is a voluntary association of individuals. Its mission statement reads:

> "The Winnipeg Commodity Exchange is dedicated to providing a public market place for responsive price discovery and risk transference of commodities with efficiency and integrity."

The WCE's role, responsibility and organization are similar to the general structure described earlier.

• *The Membership of the WCE*

There are 239 members of the WCE who are categorized as grain merchants, futures brokers, cash grain brokers, floor traders, regular elevator operators. The WCE members that interface directly with the public for trading futures/options are classified as future commission merchants (FCMs) with subcategories of introducing brokers, commodity trading advisors, commodity pool operators and associated persons. There are 80 companies registered by various exchange members for trading privileges on the WCE.

• *Self Regulation and Governance*

The exchange operates as a self-regulatory organization (SRO) which is governed by its bylaws and regulations as established by a 21-member Board of Governors, 15 of whom are elected from membership. The president of the WCE is appointed to the Board as an ex-officio governor. There are 5 appointed governors who are selected to represent the public interest.

The Board, together with standing and ad-hoc committees and with the assistance of an administrative staff govern the Exchange's cash/futures markets, supervise and monitor trading activities to ensure compliance of its trading rules, prevent anti-competitive trading practices, set financial requirements and margin policy/levels all to assure the financial integrity of its members and its futures/option markets.

- *Current Futures/Option/Cash Markets*

The WCE currently provides futures markets in feed wheat, oats, feed barley, flax, canola and peas. Options on futures contracts include all the above futures contracts except for peas and oats. There is also a cash call market for canola shipments by farmers to Vancouver. Trading in rye futures ceased in 1994.

7.1 WCE Volume of Trade and Open Interest for Futures 1975/76 to 1995/96[3]

- *Total Futures Transactions 1976/76 to 1995/96*

From the 1975/76 crop year to 1995/96, total transactions for the WCE illustrated in Figure 1 increased from 917,917 contracts to an estimated 3,500,000 or an increase of 3.6 times during this 20 year period. Canola made up 35.7% of the trade, barley 23.2%, flax 8.5%, rye 16.8%, oats 11.8% and wheat 4.0% in 1975/76. In 1994/95, the percentages of total transaction by crop changed considerably. Canola was 67.6%, barley 7.3%, flax 7.9%, rye 0.01%, oats 2.87% and wheat 9.9%. (This assumes total transactions and total volumes percentages in 1994/95 and 1995/96 are similar.) The canola trade percentage has doubled at the expense of barley, rye and oats while flax and wheat transaction volumes percentages have remained roughly the same.

- *Total Volume 1987/88 to 1995/96*

Total volume statistics represent total transactions less all broker allocations to principals, give-ups and exchange of futures for physicals. The statistics illustrated in Figure 1 indicate that total volume has increased marginally from 1,620,236 to an estimated 1,700,000 in 1995/96, a period of 8 years.

- *Total Open Interest 1975/76 to 1995/96 (Figure 1)*

Figure 1 represents monthly highs of open interest per year. The chart indicates that open interest for the total market has increased by roughly 6 times assuming that the estimated highs in open interest became a reality for 1995/96. Open interest should reach a record monthly high of over 100,000 contracts.

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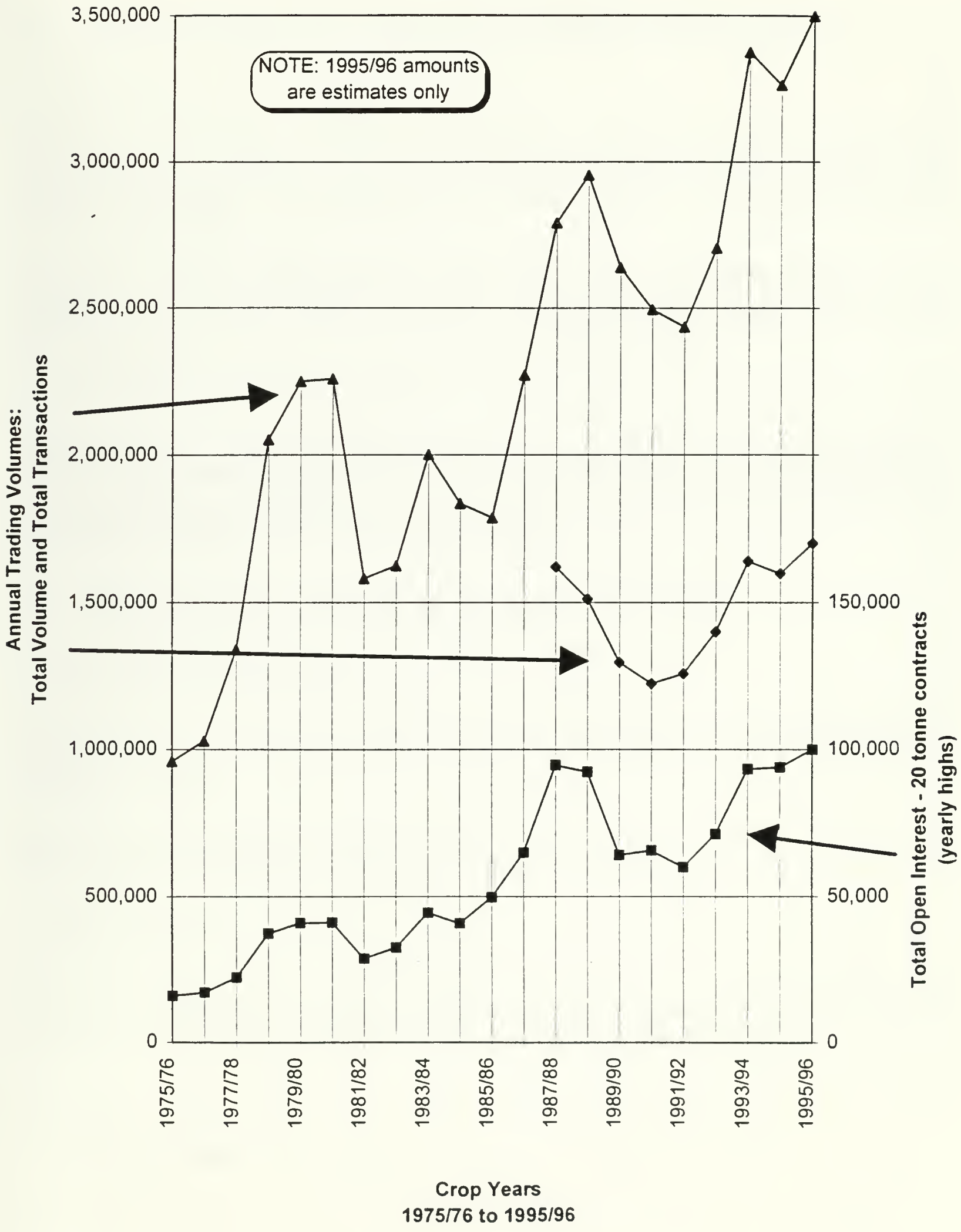
[3] See Figure 1 on page 18 and Statistics Tables 1 to 8 and 11 in Appendix.

FIGURE 1

Winnipeg Commodity Exchange
Total Transactions, Volumes and Open Interest
1975/76 to 1995/96



7.2 WCE Total Volume and Open Interest for Options 1991/92 to 1995/96[4]

- *Total Volume 1991/92 to 1995/96*

Trading in options began in September 1991 commenced with canola followed by feed wheat in April 1992, flax in February of 1993 and Canadian and Western barley in December 1993. Trading volumes have been reasonably active in canola with low to moderate activity in feed wheat, flax and barley.

Total option volume in 1995/96 should reach their highest levels since the introduction of options trading in 1991 with total volume estimated to reach over 81,000 contracts. Of this amount canola options (puts and calls) will make up 75% or 60,750 contracts.

- *Total Open Interest 1991/92 to 1995/96*

Total open interest in options continues to grow. Estimated open interest (highest month) for 1995/96 should exceed the highs made in 1993/94 on the 1994 June canola futures of 18,533. Average monthly open interest should also be the highest on record with canola options being the largest contributor to total open interest for options.

8.0 THE WINNIPEG COMMODITY CLEARING LTD. (WCCL)

- *WCCL Purpose and Functions*

The WCCL is the WCE's clearing house whose main functions are to account for and margin all transactions of futures/options contracts on the exchange through its computerized clearing and settlement processes.

WCCL is formally registered with the WCE as the clearing house by the general manager or the Chairman of the WCCL Board, who are also exchange members.

- *WCCL Membership*

There are 55 clearing members who hold shares in the WCCL, all of whom are members of the WCE. Each clearing house member is registered with the WCE in a clearing member capacity in addition to their exchange classification (grain merchant, futures broker etc.).

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[4] See Statistics Tables 9 and 10 in Appendix.

Each clearing member can clear trades for his own account. Only clearing members who are registered as a FCM with the WCE can clear for other members of the exchange and the public.

- *WCCL Self Regulation and Governance*

The WCCL has an elected board of 8 directors from the total number of clearing members/directors of WCCL. There are no public directors and no direct representation from the WCE on the WCCL board. The clearing house has a small administrative staff that operates the day to day clearing and settlement processes and carries out board policy directives.

- *Fiduciary Responsibility and Risk Management*

The WCCL acts to insure the integrity the WCE's futures options contracts against potential defaults mainly through the use of variation margining levels/procedures (on a net basis), clearing members WCCL shares, WCCL reserve capital and guarantee funds funded by the WCE and WCCL. WCCL also has the backing of substantial clearing members many of whom are large Canadian and international grain companies. (There is no formal agreement, however, as to what level of financial support these clearing members would give the WCCL in the event of a major default.)

The WCE is not a shareholder of the WCCL and can only exercise influence through the fact that clearing members are first and foremost members of the WCE and that the WCCL is a registered company on the WCE.

WCCL looks to the WCE to set the capital requirements of the exchange/clearing members commensurate with the perceived risks associated with the clearing members' level of trading activity. WCCL generally supports the WCE in any investigation or emergency actions the WCE undertakes to maintain orderly futures/options markets.

9.0 GOVERNMENT REGULATION OF THE WCE

The WCE is regulated at both the federal government and provincial government levels.

9.1 Federal Government Regulation: The Grain Futures Act

The Canadian Grain Commission (CGC) provides the federal regulatory oversight through the administration of the Grain Futures Act. The mandate of the Act is to ensure that futures trading on the exchange is conducted in such a way as to best serve and protect the public interest including farmers.

The Act also has powers that contemplate varying and/or removing any WCE bylaws and regulations with respect to such futures trading that the Canadian Grain Commission (or the Grain Futures Supervisor) finds not to be in the public interest.

9.2 Provincial Government Regulation: Various Commodity Futures Acts

Provincial governments have passed various commodity futures acts. These acts are administered by the provincial securities commissions and are designed to serve and protect the public including farmers who trade futures and options on the WCE and other exchanges.

All FCMs who trade futures/options on behalf of the public must be members of a recognized exchange of which the WCE is one. FCMs must also be registered to trade with the public within each province by each provincial securities commission.

9.3 Revisions to Federal/Provincial Statutes and Regulations on Futures Trading

The revisions are as follows:

- The Grain Futures Act has been reviewed by Mr. Robert Purvis on behalf of the Canadian Grain Commission over the past two years. Recommendations for amendments to the Grain Futures Act are just in the process of being put forward by the CGC to the Federal Government.

- The federal Bankruptcy and Insolvency Act is now in the process of being amended to protect the integrity of margined trades in the event of bankruptcy of futures trading firms. The WCE has worked towards this goal for over 10 years.

- Four securities commissions have recently updated their regulations regarding futures/options trading with the investing public. They include British Columbia, Alberta, Saskatchewan and Ontario.

10.0 WCE: RECENT CHALLENGES AND INITIATIVES

10.1 Computerization/Automation of the WCE and WCCL: Electronic Monitoring and Supervision of Futures Trading

In the late 1970s, the WCE undertook an extensive assessment regarding the computerization and automation of its trading floor. The results of the assessment culminated in the exchange relocating to its present premises and automating/computerizing its trading floor in 1980 and ultimately its office functions.

The WCE also encouraged the WCCL to make a similar assessment regarding computerizing its then manual system of clearing and settlement. The WCE saw advantages not only in gaining greater efficiencies in the clearing and settlement processes but more importantly, computerization of clearing systems/records would facilitate much improved monitoring/ supervision (coupled with the Exchange's own automated trading floor system) of WCE member trading activities. Computerization of the clearing house was finally achieved towards the end of 1984.

Computerization of both the WCE's trading floor and the WCCL's clearing and settlement processes allowed the WCE and the supervisor of the Grain Futures Act to better monitor the trading practices/activities of trading firms and floor brokers. This improved surveillance capability assisted the WCE in disciplining three members, with improper trading practices on the floor and two members with inappropriate use of customers margin funds in the mid-1980s. Parallel RCMP investigations arising from the WCE's disciplinary actions resulted in three other members being charged for trading activities outside the WCE and its futures markets.

10.2 Maintaining Open, Competitive Access to the WCE Futures/Options/Cash Markets

From the mid-1970s to the late 1980s the Exchange's trading volume and open interest increased 3 to 5 times respectively, led by increased trading in canola and barley futures. This trading growth which continues today resulted in the need for the WCE to increase its monitoring/ compliance activities regarding its trading rules and capital requirements by members. The introduction of improved electronic and computerized trade monitoring systems in the mid-1980s and the 1990s has also aided this compliance thrust.

A number of WCE compliance initiatives have been undertaken over the past several years with future plans for more improvements as trading volumes continue to grow. They include:

- Revision of WCE member categories and corresponding capital requirements.

- Revision of its futures trading rules to curb anti-competitive trading practices such as improper cross-trading, taking the other side of customer orders, trading ahead of customer orders, prearranged trading and ex-pit trading etc.

- Greater use of computerized/electronic systems to monitor/supervise trading activities by members such as the introduction of:
  - Computer algorithms to detect anti-competitive trading practices.
  - State of the art electronic audit trail records of all trades.
  - Live audio-visual record of activities on the trading floor using closed circuit television.

- Increased reporting of financial status by members relative to the exchange capital requirements.

- Increased on site WCE audits of FCMs who trade with the public.

- Establishment of guarantee funds at the WCE and WCCL to self insure against default.

- Improved administration of the self-disciplinary process for trading infractions.

10.3 WCE Futures Contract Problems: 1994 June Canola Futures Expiry

Administrating and ensuring the proper operation of the futures/option markets is an important function of any exchange including the WCE. If a futures market or contract no longer reflects the cash market for which it is designed, or is open to manipulation because of regulatory/commercial impediments (as in the case of the June 1994 canola futures) then the exchange has cause for concern and action—as do the members who trade the contract for pricing and hedging purposes and farmers who depend on the markets for reliable price signals.

The problems associated with the June 1994 futures clearly demonstrated that the canola futures contract had an apparent inability to adequately reflect the underlying domestic and export cash markets. Table 10.1 which tracks the cash/future basis levels for the year 1993/1994 ending in the June 1994 canola futures illustrates the point.

Table 10.1 Changes in Canola Cash/Futures Basis Levels During the Delivery Month, 1993/1994*

Futures Delivery Month	1st Day	Mid-Month	End of ADP deliveries $/tonne	Month End	Average Basis
September, 1993	-17.02	-15.37	-13.31	-9.80	-13.90
November, 1993	-9.08	-6.66	-9.25	-5.00	-7.50
January, 1994	-6.16	-5.87	-1.40	+1.19	-2.99
March, 1994	-1.12	-0.43	+0.31	-0.68	-0.48
Average Basis	-8.35	-7.08	-5.91	-3.57	-6.22
June, 1994	-28.36	-43.91	-24.23	+35.66	-15.21

* Source: WCE Trade Statistics for 1993/1994.

Table 10.1 indicates that in 4 out of 5 delivery months during 1993/94 cash/futures spreads narrowed towards convergence during the delivery month as expected. The degree of convergence evident in the data indicates that significant cash/futures arbitrage was operating throughout the year with the exception of the June 1994 canola futures.

Basis volatility and wide cash/futures spreads in the June 1994 futures (during the delivery month), evident in Table 10.1 clearly demonstrates that this particular futures contract had become highly congested. The futures' price relationship with cash prices had become irregular and unpredictable. This extreme lack of cash/futures price convergence was largely due to the highly congested state[5] of the futures contract combined with the fact that the delivery mechanism had become flawed by restricted regulatory control of rail cars to the port of Vancouver and commercial impediments to futures delivery at the interior alternative delivery points (ADPs).

The congested state of the canola June futures combined with the restricted regulatory control of railcars and the commercial impediments at the ADPs caused a situation in which there was no longer a realistic opportunity to make or take delivery against the June canola futures contracts. This removed any real threat of delivery and unhinged or disconnected the cash and futures prices.

As indicated earlier, the threat of delivery is a fundamental form of cash/futures arbitrage and trading discipline in a delivery-based futures market. It is designed to insure that futures prices and the underlying cash values will track together in some predictable relationship or basis and ultimately will converge upon contract maturity or expiry. Lack of a real threat of delivery will lead to unpredictable cash/futures basis and unreliable cash/futures convergence which will severely limit the use of the futures contract as a reliable market for price determination hedging/risk transference and merchandising. A lack of a realistic delivery threat will also leave the market vulnerable to manipulation and price distortion which may lead to misallocation of resources and a general loss of confidence by market participants in the integrity of the futures market.

In the case of the 1994 June canola futures contract, the extreme lack of cash/futures convergence and the congested nature of the outstanding long/short futures position in the market necessitated the need for WCE intervention. The intervention ultimately, called for the unprecedented premature closure of the June futures. Problems with the 1994 June canola futures also resulted

[5] Futures contracts which involve physical deliveries upon maturity become congested in the delivery month when the long open interest is held by one or relatively few "strong hands" and the short position is distributed among several players with limited access to deliverable supplies (canola in this case) for delivery against their short positions.

in a call by the industry for a complete review and restructuring of the Vancouver based canola futures market.

10.4 Designing/Redesigning the WCE's Futures Contracts

The problems associated with the expiry of the June 1994 canola futures contract and the resulting sharp decline in volume and open interest was an important signal for the WCE. The Exchange realized that it must revamp the canola futures contract to insure the viability of the canola futures market and indeed the Exchange itself.

Other WCE concerns included declining trading volume and open interest in its Thunder Bay based feed oats, feed wheat, feed barley, rye and flax contracts over the past 4 or 5 years such that the WCE elected to delist the rye and Thunder Bay barley futures contracts because of a lack of open interest and trading volume.

On the positive side the WCE introduced options trading in all of its futures contracts except for rye and oats. Since the introduction, option trading has been active in canola and flax and to a lesser extend feed wheat. Options on Western Barley Futures basis Lethbridge has been increasing due to the consistent growth in the futures contracts trading volume and open interest.

Since 1994, the WCE has been active in reviewing all its futures contracts with the membership. To date several recommendations for change have been implemented by the WCE. The Exchange believe these changes will make the futures contracts more relevant to the present/future underlying cash markets and as a result attract greater trading volume and liquidity to the futures contracts. The basic goals for changing the futures contract specifications are to have the contracts:

- better reflect present and future underlying cash markets;
- improve balance between competing demands of export and domestic markets;
- insure reliable cash/futures price convergence by increasing the "threat of delivery" with a delivery mechanism more consistent with the throughput nature of grains/oilseeds movement using a warrant/delivery certificate system basis FOB delivery and;
- Avoid regulatory restraints/impediments as much as possible such as government railcar allocation and other transportation regulation.

At this writing, the WCE has redesigned its canola, feed barley, feed wheat and flax futures contracts. In the case of canola, the par reference was relocated from Vancouver to a region around Saskatoon. The par reference point for Western feed barley remains at Lethbridge, for

feed wheat it remains at Thunder Bay. The par reference for flax has been moved from Thunder Bay to a region straddling the Manitoba/Saskatchewan border. The delivery mechanism in most cases has been changed, in whole or in part, to a warrant/delivery certificate system basis FOB in any regular delivery region or point specified by the WCE. The exception is for deliveries of flax and feed wheat in Thunder Bay which remain basis a warehouse receipt instore a terminal. The revised contracts also provide for more latitude in deliverable grades including the ability to delivery uncleaned grains/oilseeds at specified maximum amounts of dockage.

The WCE for the past two years, has also been working with members of the industry including growers, processors and exporters to determine the requirements for a pea futures contract. The absence of a publicly discovered price was deemed by market participants and farmers to be the missing link in the growth of peas as an important pulse crop. As a result the WCE designed and launched a feed pea futures contract in November 1995.

10.5 Farmers' Concerns Regarding Canola Futures Contract Restructuring

During the WCE review and restructuring process, the Canadian Canola Growers Association together with other supporting groups organized to express their concerns regarding some of the proposed changes for the canola futures contract. The main focus of their concerns was the potential impacts due to the proposed par pricing point change and the need for efficient, accessible delivery against futures contracts. The group were of the opinion that the par pricing point change was not required. What was required, rather was the need for efficient/cost effective access to the futures delivery process by all market participants including farmers. Two letters expressing their concerns were written, one to the WCE and the other to the CGC. They are attached in the Appendix as items 12 and 13.

11.0 POTENTIAL GAPS IN THE OPEN MARKET

Earlier discussion in this paper outlined in sufficient detail the structure and operations of contemporary futures exchanges and their clearing houses. It has reviewed the important price discovery, hedging/risk transference and merchandising functions that grain futures perform for grain merchants and farmers. The discussion on futures markets has emphasized the paramount fiduciary responsibilities of exchanges, clearing houses and their members. These involve the prudent management and clearing of all futures markets in order to assure the integrity of all futures contracts and, in so doing, to foster public trust and confidence in the market place.

This background discussion assists in the understanding of the recent challenges and initiatives with respect to the WCE's administration of its futures markets. Of particular importance here was first the need for improved monitoring and compliance of member trading practises due to increased WCE trading volumes. Second, the need for a complete review and restructuring of

the WCE contracts, particularly for canola, in which the delivery threat against the canola futures contract had become emasculated by regulatory control of transportation and commercial impediments to futures delivery on the alternative delivery points (ADPs). These impediments allowed the futures contracts to become vulnerable to congestion and even manipulation. As a result, canola futures prices and price relationships in the 1994 June expiry would not converge or even bear a relationship with Vancouver cash prices. The June canola futures contract could no longer serve its main functions of price discovery and hedging which led to the need for WCE intervention. In fact, the June canola futures contract had become a liability to hedgers who could not delivery against their short futures positions. The 1994 June canola expiry problems signalled the need for revamping the futures contract.

As stated earlier, this discussion of problems (which the WCE has addressed in a reasonably, satisfactory manner within the regulatory and commercial limitations of the Canadian grain industry), assists in the understanding of the functions and operations of futures markets. The discussion also serves to identify the potential gaps within the WCE if open market grain trading is further expanded to include export wheat and barley. This assumes of course that the regulatory controls of the CWB over export wheat and barley trading are relaxed or relinquished altogether.

The following points outline some areas in which gaps concerning the potential open export of wheat and barley that will appear for the WCE/WCCL to address. Government policy makers and regulators must also be aware, cognizant of these gaps. They may wish to influence the manner in which they are addressed by the WCE/WCCL so that the farmers and general public interests are best served and protected. These gaps concern the following:

- The need for the WCE to develop:

  - A barley futures contract that will efficiently discover and make transparent Canadian barley prices and provide an effective risk transference (hedging) facility for Canadian and international feed/malting participants in both domestic and export markets.

  - A wheat futures contract that will efficiently discover and make transparent Canadian wheat prices and provide an effective risk transference (hedging) facility for Canadian and international milling/feed participants in both domestic and export markets. This may include developing a future contract for durum wheat.

  - The wheat and barley contracts must incorporate within the contracts' specifications, par pricing points and alternative delivery areas that reasonably reflect the relative importance of the underlying export and domestic cash markets. A real threat of delivery against future contracts must be cast within the design to

discipline cash/futures price relationships over time and ensure convergence upon contract maturity. Access to futures delivery should be efficient and available to all market participants including farmers. The delivery mechanism by which futures delivery is accomplished must be consistent with the throughput nature of the grain handling system and compatible with transportation deregulation.

- The need for the WCE to assess:
  - The WCE's trading floor system(s) to effectively accommodate and monitor the potential increase in futures/option trading emanating from both domestic and international market participants due to wheat/barley marketing deregulation.
  - The WCE's clearing house WCCL to effectively clear and assume the risk of the potential increased futures/option trading and open interest positions of the wheat and barley futures/option markets in order to maintain/insure the integrity of the WCE's futures contracts.
  - The WCE's membership and other Canadian open market participants to raise the capital required to market and trade futures in all grains, oil seeds and pulses as well as meet any increased balance sheet capital requirements of the WCE.
  - The WCE and its membership to recruit, train and monitor additional trading floor staff, futures/option traders required as a result of increased futures/option trading on the floor of the WCE.
  - The WCE's futures/option markets to compete with those of U.S. Exchanges and other international grain related market places for domestic and international futures/option both commercial and speculative trade participation.
  - The progress of government grain transportation deregulation and its impacts on the degree of direct access to transportation facilities by Canadian grain interests for purposes of effective, efficient deliveries of grain against both cash and futures contracts.
- The need for the Federal and Provincial regulatory organizations to assess the adequacy of the present regulatory machinery to effectively oversee the market and public fiduciary responsibilities of the WCE, WCCL and its membership in a deregulated grain industry environment.

12.0 CLOSING POTENTIAL GAPS IN THE WCE OPEN MARKET SYSTEM

12.1 WCE Design of New Canadian/International Wheat and Barley Futures Contracts

Both futures contracts in wheat and barley traded on the WCE are for domestic feed use only. Therefore, the WCE will be required to design new wheat and barley futures contracts that will reflect balance between competing domestic and exports markets for wheat and barley.

As a consequence, the barley and wheat futures contracts should incorporate the following key elements to reflect the potential expanded use:

- A Par Price Reference with strategically placed ADPs at appropriate discounts or premiums so as to reflect the relative importance of the domestic/export cash markets and changes thereof over time for the wheat and barley futures contracts.

- Expanded deliverable grades that include, in the case of the new wheat futures contract, NO.I CWRS as the par grade and lower grades at appropriate but variable discounts.

- Expanded deliverable grades that include, in the case of the new barley futures contract No.I Canadian western feed barley with lower grades at appropriate but variable discounts. Malt barleys should be made deliverable at appropriate but variable premiums.

- A future delivery mechanism for both wheat and barley futures contracts that is consistent with the throughput nature of grain movement in Western Canada such as the warrant/delivery certificate basis FOB delivery. Access to future deliveries should be efficient and available to all market participants including farmers so as to provide an effective threat of delivery against futures contract to discipline the futures/cash relationship.

- All main cash markets must be made as price transparent as possible.

12.2 WCE's New Wheat and Barley Futures Contracts: Domestic and International Recognition

Assuming fundamentally sound futures/option contract design, the WCE will need to attract domestic/international commercial and speculative to trade in these new futures markets by an aggressive marketing and education program. As part of this program the WCE should:

- Ensure that the Commodity Futures Trading Commission (CFTC), the U.S. futures regulatory authority, recognize the new futures contracts and approve the futures contracts

for American participation. This can be accomplished through the assistance of the WCE's own federal and provincial regulatory authorities and by direct representation.

• Form arbitrage agreements with other North American grain exchanges such as the Minneapolis Grain Exchange (MGE), the Kansas City Board of Trade (KCBOT) and the Chicago Board of Trade (CBOT) to encourage arbitrage/spreading between their respective wheat/feed grain futures contracts and those of the WCE.

• Encourage new membership in the WCE and the WCCL as increased cash trading in wheat and barley becomes evident and attracts new entrants to the Canadian grain industry. These new members must be well qualified and adequately financed and must include the CWB.

12.3 WCE Need to Forecast Trends in Futures/Option Trade Volume and Open Interest

Forecasting future trading volumes for the WCE is difficult given the number of variables that would be involved. However, it will be necessary in this case because of such a potential large structural change to the Canadian grain industry in the event of export wheat and barley marketing deregulation. A change of this magnitude will cause a significant shock to the open market system much of which will impact on the WCE and the WCCL.

To illustrate the point, it is useful here to make a rough estimate based on futures trading in wheat at the KCBOT and MGE and corn at the CBOT. Comparing futures trade volume with the yearly supply of wheat and corn reveals that the supply of each crop is traded by the futures contract roughly 5 times. This suggests that the extrapolated volumes and open interest for open market wheat and barley futures on the WCE will be as follows in 20 tonne contracts:

	Volume/Year	Open Interest
Wheat	8,750,000	218,750
Barley	3,500,000	87,500
Totals	12,250,000	306,250

These estimates are based on a 35 million tonne supply of wheat and 14 million tonne barley supply divided into 20 tonne contracts and multiplied by 5. The WCE's open interest is usually traded 40 times per year. This multiple is divided into the volume to determine the open interest.

(Open interest is the number of open futures contracts not consummated by delivery or trade offset.)

Adding these potential futures trading estimates of 12,250,000 contracts per year to the 1994/95 trading statistics to the present day range of trading volumes (all transactions) and open interest dramatically expands the potential Exchange trade activity. This trade volume is estimated to be approximately 15 million contracts per year with a total average open interest of around 375,000 contracts not including the expanded trade potential in options. It is anticipated that this yearly trade estimate may be realized in less than five years.

To emphasize, this is a rough estimate of the futures trading potential. It compares to the old Winnipeg Grain Exchange trading volume of around 6 to 8 million contracts per year when wheat and all other crops (barley, oats, rye, flax) were trading on the open market prior to 1940.

12.4 WCE Competition from U.S. Exchanges

All three U.S. grain/futures exchanges have long standing, well established wheat contracts with a solid base of open interest ranging from 25,000 contracts (MGE) to 35,000 contracts (KCBOT) up to 100,000 contracts (CBOT). These are 5,000 bu. contracts or the equivalent of 170,000, 240,000 and 680,000 20-tonne contracts for the three U.S exchanges respectively.

These wheat futures contracts, however, represent different classes of wheat. The MGE trades dark northern spring wheat, the KCBOT trade hard red winter wheat and the CBOT trades soft white winter wheat, each with their own supply and demand characteristics. The WCE will be trading Canadian western red spring wheat (CWRS) and of course its supply/demand characteristics will be different.

The ability for the WCE to compete with other exchanges, will depend on how well the WCE designs its wheat futures contract to reflect the domestic/international cash markets in CWRS wheat and how liquid the futures contract will be once it starts trading. If the Exchange designs an effective futures contract for the CWRS cash markets, the futures/cash basis risks will be minimized, making the futures contract an efficient price discovery and hedging tool-technically. This will not necessarily mean a successful futures contract. What is also critically important for grain traders/merchants besides a well designed futures contract is the liquidity and integrity of the futures contract. Liquidity is measured by the degree to which large orders can be absorbed by the futures market without major impacts on price. It is also a function of the size of the open interest throughout all the futures months that are trading at any one time and how often this open interest is turned over each week. The size of the open interest of the contract is also a measure of confidence that traders have in the futures contract—and what confidence they have that the exchange/clearing house can ensure the integrity of the futures contract.

The most direct competition for the WCE in wheat futures trading will come from the MGE because dark northern spring wheats compete directly with CWRS wheats. Dark northern spring wheats have similar general quality and production patterns. The MGE also have the benefit of having the CWB trading in their wheat futures market, now. According to CWB sources, the Board has traded and held over the year 5 percent to 20 percent of the MGE's wheat open interest. They plan to increase their participation in the MGE's wheat futures market as more of their customers wish to trade their cash requirements basis exchange for futures rather than flat. The CWB also makes selective use of the KCBOT and the CBOT wheat futures markets for pricing/hedging purposes.

With respect to barley futures trading, the MGE plans to introduce a malt barley futures contract which could become a proxy for feed barley if it is successful in attracting trade liquidity. Here the WCE has the advantage over the MGE because of its long history of barley futures trading and much larger production of feed/malt barley. This assumes, of course, that the WCE successfully redesigns its barley futures to reflect world market values and the futures contract is highly liquid.

Finally, the WCE will need to measure the potential impact of U.S. Exchange competition on futures trading volumes that the exchange will experience if and when international open market wheat and barley futures trading on the WCE becomes a reality.

12.5 WCE Management Assessments and Use of Futures Trading Forecasts

There are a number of management assessments the WCE will likely need to undertake once a thorough study to determine the trading forecasts for wheat and barley has been completed. They include:

- An assessment of the WCE's present trading floor facilities and trade reporting/monitoring systems capacities to accommodate the potential increase in futures/option trading will be necessary to determine future capital investment requirements. This assessment should also include the impacts of new computer technology and how automated order routing and computerized trading might be incorporated in the Exchange's future trading floor systems and design.

- Forecasts of increased margin requirements should also be determined based on the futures trade volume/open interest projections. These estimates will measure the magnitude of capital required by members to trade and hold positions in a much expanded futures market, under both normal and volatile conditions. Presently the WCE has a total open interest in its futures markets totalling around 85,000 contracts. The margins required to hold these positions by members might average for example about $1,000 per contract for a total of $85,000,000 for the whole market. If the total open interest is expanded to 375,000 contracts (as per this paper's rough

forecast), then the margin capital required by members will likely increase 4 to 5 times or from $85,000,000 to $375,000,000. (The ratio of outright positions in relation to spread positions in the market will modify this amount.) The point is that either the capital base of existing members will need to be increased 4 to 5 times (if the rough estimate holds true) and/or the number of new members or entrants to the market will emerge to make up all or part of the difference. The WCE today has some 239 members and some 80 companies registered for trading privileges.

• Increased margin and member capital required to support the futures trading is only part of the capital requirement equation. Grain merchants/traders will also require significant increases in capital to assume their own positions in the wheat/barley cash markets. These cash positions will come from trading with other market participants and direct purchases from farmers, all of which will need to be financed—either from their own financial resources and/or from the short term capital markets. Given that there are 20 to 25 million tonnes of wheat and barley exports annually valued today between $5 to $7 billion, the increased short term capital financing required by Canadian grain merchants will be significant. This will also have an impact on the WCE's minimum capital requirements for its grain merchant members.

• An assessment of the WCE's clearing house WCCL will be essential to assure the WCE and others that the WCCL can continue to assume the risk and fiduciary responsibilities as contra-party associated with the potential increase in futures/options trading volumes and open interest. This risk management audit must determine the adequacy of the WCCL's financial resources at its disposal and its risk management procedures/practises that are the mainline defence against the risk of clearing member default(s). The same risk management analysis must be made of the clearing members themselves regarding the adequacy of their financial resources and risk management procedures. Governance and risk management coordination between the WCE and the WCCL by necessity will need to be improved as trading activity of the Exchange expands. To achieve this end, the WCE/WCCL should explore, the concept of the interlocking directorships in which the CEO and the chairman of the WCE (or their alternate designates) be appointed directors of the WCCL. Likewise the chairman of the WCCL should be an appointed board of governor of the WCE. Moveover, assuming there is one corporate share of WCCL per clearing member (who also may be a board director), the WCE should purchase 2 shares of the WCCL, one share for each WCE director on the board of WCCL. The WCCL through its chairman/general manager is already a registered company/member of the WCE. The benefits of interlocking directors and WCE holding shares in the WCCL are to ensure risk management policy harmonization and coordination between these two separate important interrelated entities of the marketplace.

• As part of this WCE/WCCL governance issue, an assessment of WCE/WCCL future staffing and training needs will become apparent. Also the recruitment and training of future/option floor traders will be crucial as the floor population of traders will likely expand from around 50 to over

200 with accompanying support staff (runners, clerks, etc.). Automated order routing and computerized trading if introduced may modify this trading floor population projection.

13.0 GOVERNMENT REGULATION OF WCE: PROPOSED CHANGES

Federal and provincial regulations of futures options of grain on the WCE will need to be further harmonized if wheat/barley marketing is further deregulated and the WCE expands its range of futures/options contracts to include non-grain commodities.

At present there are three federal acts and up to ten provincial acts dealing directly or indirectly with futures trading. The federal statutes, Canada Grain Act (CGA), Canadian Wheat Board Act (CWBA), regulate grain dealers and trading in cash grain. The Grain Futures Act (GFA) supervises trading in grain futures/options on the WCE. The various provincial acts focus on trading of all futures/options including grain by their respective "publics" through futures commission merchants (FCMs) who are registered (by the provincial securities commissions) and must be members of a recognized exchange or SRO.

The Canadian Grain Commission recognize that the Grain Futures Act (GFA) requires revision. To this end, the CGC commissioned a review of the GFA by Mr. Robert P. Purvis who has come forward with recommendations for changes to the GFA.

The Purvis review of the GFA has recommended replacing the GFA with the Grain Trading Act (GTA) which envisions regulatory powers over the WCE as a SRO/RGE (recognized grain exchange). These powers include regulatory oversight of futures/option trading, membership qualification, rules of trade, futures contract approvals, amendments and FCM rules, etc. The GTA would also have powers to recognize and oversee other SROs/RSOs (recognized service organization) as well as to register all grain dealers including those licensed under the CGA. It would also recognize/supervise the WCE's clearing house, WCCL separately from the Exchange. The recommendations contemplate the administrator/regulator of the GTA to be the Canadian Grain Commission.

The GFA review recommendations are sound and applicable from a grain industry perspective. The recommendations, however, appear silent on the issue of federal/provincial harmonization of regulatory supervision as it relates to the WCE's FCM rules and power to amend the same. This observation extends to the recognition of SROs such as the WCE and the harmonization of conditions/procedures to be adopted for such recognition by both federal and provincial regulators. The recognition process will also apply by logical extension to the WCE's clearing house, WCCL for both levels of government. Here, for example, the provincial regulators may have valid concerns regarding the WCCL and therefore may wish to have some regulatory influence over the WCCL's risk management practices/procedures. Another concern is the

possibility/probability that the WCE once recognized as a SRO/RGE may wish to or commence trading in non-grain futures/options in which case the non-grain futures/options would fall outside the regulatory net of the GTA. The reality of this scenario may create problems for both WCE/WCCL and the administrator/regulator of the GTA.

Two regulatory dichotomies are identified above 1) the potential of grain/non-grain futures/options trading on the WCE, 2) federal/provincial regulations regarding the recognition of SROs and RCHs (registered clearing houses) such as the WCE and WCCL respectively. Two suggestions are proffered here to bridge these differences. A third suggestion is included which relates to ensuring that there is a technical hearing/appeal process for farmers/farm associations regarding the design of and changes to grain or agriculture futures contracts/options. They are:

1) Change the proposed name of the GTA to the Grain Trading and Futures Act (GTFA) or a second alternative, the Commodity Trading and Futures Act (CTFA). This name change will broaden the application of the Act to include futures/options trading in both grain and non-grain commodities.

2) Incorporate within the GTFA or CTFA the involvement of both the federal and provincial governments to jointly administer the Act. Envisioned here, is that the provincial and the federal authorities form a joint commission involving the CGC and provincial securities commission designates or alternatively, a separate organization be formed to administer the Act supported by the federal and provincial governments. The chairman of the GTFA would be federal with perhaps a provincial vice or deputy chairman. The federal government through the CGA and the provincial governments through the various securities commissions would jointly fund the administration body. The actual administrator of the Act for the WCE/WCCL purposes could be either the CGC or the Manitoba Securities Commission (MSC) but not both.

3) The proposed changes to the Grain Futures Act envision having a public hearing and appeal process on general matters concerning the WCE/WCCL. This provision should be expanded to include in the Act a more specific process that will allow for technical hearings regarding the designing or changing existing specifications of futures/option contracts that affect farmers directly; that is those futures contract/options that price the farmers' production such as grains/oilseeds. Introduction of technical hearings will permit farm/commodity associations, representing farmers' specific commodity interests to have important input to any futures contract specification changes such as par reference or pricing points, deliverable grades and their premiums or discounts as well as alternative delivery areas including delivery discounts or premiums to the par reference specified in the futures contract.

- *Advantages of a Joint Federal/Provincial Regulatory Commission*

A joint commission of federal and provincial authorities regulating all futures/option trading which incorporates public and technical farm/industry hearings/appeals would have the following advantages:

- maintain the international status of a federally regulated futures/option exchange.

- provide greater facility to harmonize futures trading policies and regulation between Canada, United States and other jurisdictions.

- bring together the domestic and international aspects and supervision of all futures/option trading by commercial and public market participants including farm/commodity interests.

- ensure all grain and non-grain commodity futures/options fall within the regulatory net.

- harmonize futures/option trading regulation policy within the provinces and between the provinces and federal government.

- equitably share the costs of regulating futures/option trading and futures/option exchanges.

14.0 SUMMARY

This paper has outlined the structure and operations of contemporary future exchanges and clearing houses. It has reviewed the important price discovery, hedging/risk transference and merchandising functions that grain futures perform for grain merchants and farmers. The discussion has also emphasized the paramount fiduciary responsibilities of exchanges clearing house and their members. These responsibly involve the prudent management and clearing of all future markets in order to assure the integrity of all future contracts and in so doing to foster public trust and confidence in the marketplace.

This fundamental information regarding the structure and operations of contemporary North American future exchanges/clearing houses is an important reference by which the preparedness of the WCE/WCCL to meet the future challenges can be measured in the event of a federal government deregulation of export wheat and barley. A review of recent WCE challenges and how the WCE has met these challenges has found that:

• The WCE has introduced the necessary changes to its trading rules and regulations to foster orderly and competitive futures/cash markets on the exchange. Appropriate rules and regulations regarding membership classification and associated capital requirements for members are also in place. Moreover, monitoring the compliance of these rules/regulations by members is ongoing and diligently pursued by the WCE compliance staff.

• The WCE has implemented the state of the art monitoring and surveillance system to monitor trading activity and to ensure member compliance of the trading rules which are designed to maintain orderly, open and competitive futures trading on the floor.

• The WCE has embarked on an ambitious program of reviewing futures and restructuring all of its futures contracts in order that the revised contracts meet the price discovery/hedging needs of its membership and that of the farm community. This program, while not yet fully completed, is now showing positive results with respect to increased trading volumes and the return of trader confidence represented by growing open interest. The main changes to the futures contracts have been the introduction of the warrant/delivery certificate FOB delivery mechanism and allowing for the delivery of uncleaned grains and oilseeds. These positive changes inherently increase the threat of delivery against future contracts and will no doubt improve the cash/futures relationship and eventual convergence upon futures contract expiries.

The relocation of the par reference point for the canola contract in particular is questionable however. Some market participants and farm commodity associations did not see the necessity of such a major change before observing the benefits arising from the introduction of the new delivery mechanism and more latitude in uncleaned deliverable grade specifications. Time will tell as to the wisdom of relocating the par reference point for canola, particularly as applies to striking the necessary balance between the competing export and domestic markets for canola.

Potential gaps to be addressed by the WCE and Government regulators

A number of gaps will need to be addressed with respect to the WCE/WCCL and government regulation/regulators of the Exchange. This will be particularly important in the advent of export wheat and barley deregulation which may result in futures trading reaching an estimated 15 million contracts per year on the WCE within five years. These gaps are in four main areas: 1) wheat/barley futures contract design, 2) WCE administration assessments, 3) WCE/WCCL risk management assessment and coordination, and 4) government regulation. The gaps are explained further below:

- *Wheat/barley futures contract design*

It will be necessary for the WCE to develop both a wheat and barley futures contract that will efficiently discover and make transparent Canadian wheat/barley prices in competition with world markets. The contracts must also provide an effective risk transference/hedging and merchandising facility for domestic and export market participants.

These contracts must be both technically sound, and highly liquid in order to attract large Canadian and international players. These new wheat and barley futures markets will need to be competitive with and as liquid as the wheat/barley futures markets trading on the MGE and the wheat futures on the KCBOT and CBOT. Here arbitrage/spreading agreements with these U.S. grain exchanges will enhance trading activity on the WCE new wheat and barley futures markets and may preempt direct competition from the MGE/KCBOT or CBOT.

- *WCE Administrative Assessments*

The potential introduction of these new contracts and the resulting impacts of large trading volumes will require the WCE to make a number of assessments regarding the administration of the markets and self regulation of its membership. These assessments among others will entail focussing on the adequacy of the WCE's trading floor systems and facilities, monitoring/surveillance systems, staffing and floor trading training programs, membership capital requirements and impacts of transportation deregulations on cash/futures markets.

- *WCE/WCCL Risk Management Assessment and Coordination*

A critically important assessment will be on the WCE/WCCL's ability to monitor and effectively clear and settle the increased trading volumes in order to maintain the integrity of the WCE futures/option contracts. Here, the WCE and the WCCL will find it necessary to review their risk management policies practices and procedures and find ways to better coordinate these matters between them. This might include the introduction of interlocking directorships on the two boards. This risk management audit will be essential to assure the WCE and others that the WCCL can continue to assume the risk and fiduciary responsibilities as contra-party in the event of sharply high volumes and market volatility arising from export wheat/barley trading on the WCE.

- *Government Regulation/Regulators of the WCE/WCCL*

There will be a need for the federal and provincial regulatory authorities to assess the adequacy of the present regulatory machinery to effectively oversee the WCE/WCCL and futures trading generally. This review is now in process and hopefully will incorporate: the need for federal/provincial harmonization of regulations/regulatory requirements; encompass futures trading

in all commodities including grain that might be traded on the WCE and; allow for technical hearings/appeals on futures contract design and delivery specifications for market participants including farmers.

Moreover, the act that regulates futures trading and futures exchanges/clearing houses should be a federal statute—perhaps administered by a joint commission of federal and provincial designates with one administrative body that oversees the WCE. This will maintain the international status of a federally regulated futures/option exchange for the WCE. It will provide greater facility to harmonize futures trading policies and regulation within Canada and between Canada and other jurisdictions particularly the United States.

15.0 CONCLUSIONS

At present, the Winnipeg Commodity Exchange is capable of meeting the expanded responsibilities and opportunities that may arise if the federal government decides to deregulate wheat and barley marketing in whole or in part. However, like all exchanges the WCE has weaknesses regarding the lack of liquidity or "thinness" in some of its contract markets. This liquidity problem is being addressed by the Exchange to the extent that is currently possible. Government deregulation of transportation and now possibly grain marketing in export wheat and barley will assist the WCE's efforts in this area immeasurably—because the liquidity issue in WCE's futures trading is also a function of regulatory control of export wheat and barley marketing and grain transportation.

No doubt, there will be growing pains as the Exchange and its members address the impacts of any major structural change to the Canadian grain industry. Moreover, if there is to be open market trading of export wheat and barley, the WCE/WCCL will require sufficient lead time to address the gaps identified in this paper particularly in the areas of: wheat and barley futures contract design, WCCL's clearing and settlement policies and procedures, any regulatory futures contract approval requirements, and WCE marketing/education efforts to promote the contracts, among others.

In all of this the WCE in the institutional sense must not become complacent or arrogant. Its role is both a commercial and public one and in fulfilling this role the WCE must balance the interests of the industry; exporters, domestic processors and farmers. Its futures, options and cash markets must also be balanced, accessible and transparent to all market participants including the farmers and the general public. Above all else, the Exchange, the clearing house and the members must fulfil their paramount fiduciary responsibilities which are to assure the integrity of all the Exchange's contract markets and in so doing to foster trust and confidence in the WCE as an important marketplace for the Canadian grain industry.

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APPENDIX

TABLE 1

THE WINNIPEG COMMODITY EXCHANGE
MONTHLY VOLUME OF SALES BY COMMODITY

1987/88	WHEAT	OATS	BARLEY	ALBERTA BARLEY	RYE	CANOLA/ RAPESEED	FLAXSEED	20-OZ. GOLD	20-OZ. OPTIONS	200-OZ. SILVER	TOTAL
August	13,210	2,746	15,165	---	12,352	71,845	12,789	32	---	1	128,140
September	20,699	5,397	30,841	---	14,529	93,376	40,869	1	---	40	205,752
October	31,257	6,428	26,720	---	9,822	121,599	33,113	1	---	5	228,945
November	31,601	7,401	42,003	---	12,001	102,507	31,931	27	---	1	227,472
December	24,971	3,679	29,686	---	3,241	127,547	17,708	---	---	1	206,833
January	17,648	7,460	39,075	---	6,113	137,387	22,077	---	---	---	229,760
February	19,890	3,200	47,581	---	9,445	131,618	22,854	14	---	---	234,602
March	17,766	3,436	30,838	---	4,242	92,012	18,915	12	---	19	167,240
April	25,537	5,605	70,389	20	6,806	104,171	28,454	---	---	---	240,982
May	27,432	5,067	68,412	---	8,978	170,733	33,336	---	---	---	313,958
June	50,375	11,250	108,355	---	12,889	132,602	49,561	---	---	---	365,032
July	39,717	7,904	90,094	---	5,319	72,880	26,443	---	---	---	242,357
Total	320,103	69,573	599,159	20	105,737	1,358,277	338,050	87	—	67	2,791,073

THE WINNIPEG COMMODITY EXCHANGE
MONTH END OPEN INTEREST

1987/88	WHEAT	OATS	BARLEY	ALBERTA BARLEY	RYE	CANOLA/ RAPESEED	FLAXSEED	20-OZ. GOLD	20-OZ. OPTIONS	200-OZ. SILVER	TOTAL
August	4,678	1,118	9,086	---	4,139	23,939	6,747	15	---	22	49,744
September	6,259	1,427	11,273	---	3,518	27,953	8,276	14	---	21	58,741
October	7,338	2,055	13,089	---	3,542	23,857	5,690	13	---	22	55,606
November	8,212	2,098	13,030	---	2,876	21,953	5,792	12	---	21	53,994
December	7,471	1,784	12,003	---	2,437	29,265	5,089	12	---	22	58,083
January	9,321	2,077	18,516	---	2,456	30,901	6,179	12	---	22	69,484
February	10,684	2,244	22,409	---	2,833	34,534	6,972	12	---	22	79,710
March	9,395	2,145	22,371	---	2,919	32,538	5,787	---	---	3	75,158
April	10,400	2,331	28,798	---	2,211	34,064	6,920	---	---	---	84,724
May	8,745	2,152	25,665	---	2,738	35,518	6,191	---	---	---	79,009
June	14,024	2,709	33,487	---	3,969	32,020	8,431	---	---	---	94,640
July	13,455	2,648	34,075	---	3,463	29,639	6,101	---	---	---	89,381
Average	9,165	2,066	20,317	—	3,092	29,682	6,514	10	—	15	70,689

THE WINNIPEG COMMODITY EXCHANGE
ANNUAL TRADING VOLUME (CONTRACTS)

YEAR	WHEAT	OATS	BARLEY	ALBERTA BARLEY	RYE	CANOLA/ RAPESEED	FLAXSEED	20-OZ. GOLD	20-OZ. OPTIONS	200-OZ. SILVER	TOTAL
1974/75	128,769	159,315	433,893		153,069	322,848	83,027	108,891			1,396,174[a]
1975/76	37,448	109,609	215,877		155,782	331,570	78,555	30,985			959,917[b]
1976/77	71,082	89,514	225,971		99,929	423,104	102,879	17,513			1,029,992
1977/78	152,224	111,298	325,326		103,311	482,557	152,692	13,618			1,341,026
1978/79	309,653	112,095	722,485		119,174	581,506	198,037	9,250	269		2,052,469
1979/80	263,768	125,622	808,796		149,607	633,880	275,642	2,442	1,001		2,260,758
1980/81	178,484	154,209	620,164		191,454	684,839	425,865	1,851	219	1,281	2,259,229[c]
1981/82	101,131	96,685	361,386		183,296	568,502	268,257	693	24	1,736	1,581,793[d]
1982/83	84,257	61,537	386,156	5,090	177,610	690,612	215,811	604	27	3,437	1,625,141
1983/84	117,022	101,879	620,859	2,372	191,938	743,861	220,207	389	---	3,297	2,001,824
1984/85	97,819	64,422	332,568	433	193,882	929,599	215,780	115	---	891	1,835,509
1985/86	135,757	28,085	297,323	49	144,587	939,610	241,425	187	---	267	1,787,290
1986/87	219,576	43,555	305,260	2	115,989	1,291,290	296,891	157	---	146	2,272,866
1987/88	320,103	69,573	599,159	20	105,737	1,358,277	338,050	87	---	67	2,791,073

a) Includes 6,092 corn futures and 270 live beef futures.
b) Includes 91 corn futures.
c) Includes 414 T-bill futures and 449 LT Bond futures.
d) Incllludes 80 T-bill futures and 3 LT Bond futures.

TABLE 2

THE WINNIPEG COMMODITY EXCHANGE
MONTHLY VOLUME OF SALES BY COMMODITY

1988/89	WHEAT	OATS	BARLEY	ALBERTA BARLEY	WESTERN BARLEY	RYE	CANOLA	FLAXSEED	TOTAL
August	13,677	3,093	29,124			2,141	61,506	16,185	125,726
September	22,031	2,174	57,257			5,582	66,555	27,712	181,311
October	22,891	1,749	20,702			1,922	81,043	15,813	144,120
November	23,141	2,600	46,838			3,486	57,266	21,999	155,330
December	10,195	1,475	17,837			1,643	60,999	10,898	103,047
January	15,984	4,828	20,610	5		2,066	53,322	21,275	118,090
February	12,964	3,723	26,520			2,084	62,513	13,571	121,375
March	10,278	4,181	17,059			2,114	53,926	12,686	100,244
April	12,410	5,720	26,051			1,855	53,143	15,703	114,882
May	10,388	4,302	24,213		521	1,561	80,411	14,630	136,026
June	7,778	7,362	19,084		1,267	2,850	62,378	16,251	116,970
July	6,311	6,384	14,510		747	2,411	52,661	11,905	94,929
Total	168,048	47,591	319,805	5	2,535	29,715	745,723	198,628	1,512,050

THE WINNIPEG COMMODITY EXCHANGE
MONTH END OPEN INTEREST

1988/89	WHEAT	OATS	BARLEY	ALBERTA BARLEY	WESTERN BARLEY	RYE	CANOLA	FLAXSEED	TOTAL
August	14,171	2,820	34,081			3,650	28,000	7,232	89,954
September	16,595	2,576	34,065			3,533	26,751	8,078	91,598
October	16,924	1,942	29,142			3,231	31,230	9,874	92,343
November	15,026	1,794	23,490			2,500	26,380	10,695	79,885
December	13,891	1,724	22,076			2,189	28,779	7,228	75,887
January	11,736	2,877	20,456	5		2,636	22,024	8,616	68,350
February	10,026	3,897	17,109			2,240	20,428	6,965	60,665
March	7,039	4,192	13,375			1,552	21,336	5,716	53,210
April	7,566	5,610	14,524			1,707	25,419	6,455	61,281
May	5,898	5,560	11,505		252	1,740	21,985	7,296	54,236
June	6,022	7,636	7,753		579	2,224	22,524	8,964	55,702
July	4,725	5,879	9,090		662	1,970	22,268	8,743	53,337
Average	10,802	3,876	19,722	0	498	2,431	24,760	7,989	69,704

THE WINNIPEG COMMODITY EXCHANGE 1988/89 VOLUME
Comparison by Commodity

1988 / 1989

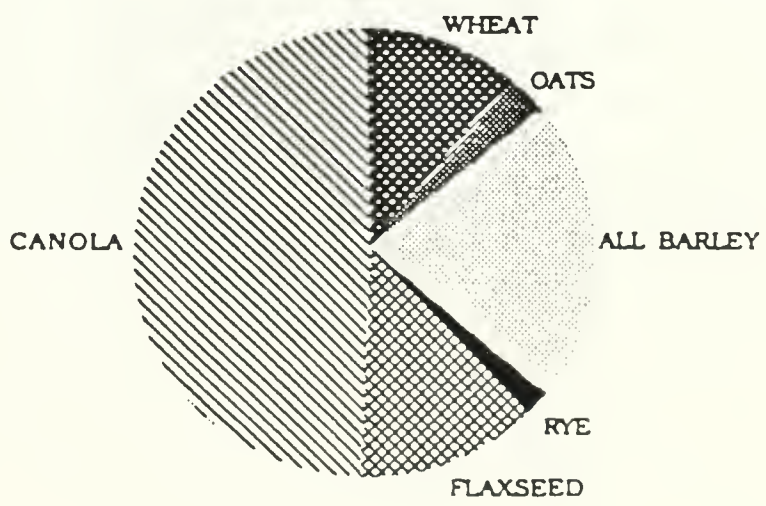


TABLE 3

THE WINNIPEG COMMODITY EXCHANGE
MONTHLY VOLUME OF SALES BY COMMODITY

1989/90	WHEAT	OATS	BARLEY	WESTERN BARLEY	RYE	CANOLA	FLAXSEED	TOTAL
August	7,923	3,857	20,703	1,331	4,506	51,673	11,313	101,306
September	13,329	6,678	20,887	1,128	3,717	50,701	21,633	118,073
October	10,112	8,319	15,155	1,284	5,031	76,917	18,785	135,603
November	14,360	8,777	28,753	512	4,095	76,173	12,798	145,468
December	4,881	3,574	11,416	351	1,693	50,947	6,082	78,944
January	8,543	4,983	11,236	1,338	2,295	52,473	13,678	94,546
February	6,189	4,000	19,125	202	2,379	66,423	16,180	114,498
March	6,988	7,939	11,564	760	2,512	52,720	13,598	96,081
April	11,168	7,909	18,222	683	2,586	55,158	8,144	103,870
May	8,847	8,643	16,359	573	3,239	82,685	7,174	127,520
June	7,333	4,581	15,754	1,963	3,484	53,085	7,123	93,323
July	9,997	3,511	11,391	1,332	3,007	51,270	7,330	87,838
Total	109,670	72,771	200,565	11,457	38,544	720,225	143,838	1,297,070

THE WINNIPEG COMMODITY EXCHANGE
MONTH END OPEN INTEREST

1989/90	WHEAT	OATS	BARLEY	WESTERN BARLEY	RYE	CANOLA	FLAXSEED	TOTAL
August	5,941	5,747	12,854	724	3,355	20,894	9,600	59,115
September	8,475	5,878	15,178	671	2,753	17,721	6,147	56,823
October	8,653	8,045	13,207	687	3,515	24,718	5,308	64,133
November	6,380	3,997	11,708	596	2,876	21,690	3,734	50,981
December	6,182	2,974	10,230	630	2,618	20,977	3,295	46,906
January	7,519	3,103	10,279	725	3,297	20,892	4,354	50,169
February	7,483	4,013	11,936	607	2,054	17,634	5,435	49,162
March	6,184	4,292	9,330	642	1,996	17,608	5,651	45,703
April	8,847	4,680	10,746	639	2,477	23,920	5,319	56,628
May	8,400	3,501	10,459	632	2,653	23,770	4,882	54,297
June	9,201	2,700	11,487	1,072	2,445	22,251	5,128	54,284
July	10,303	2,308	9,813	1,511	2,772	22,595	4,972	54,274
Average	7,797	4,270	11,436	761	2,734	21,222	5,319	53,539

THE WINNIPEG COMMODITY EXCHANGE 1989/90 VOLUME
Comparison by Commodity

1989 / 1990

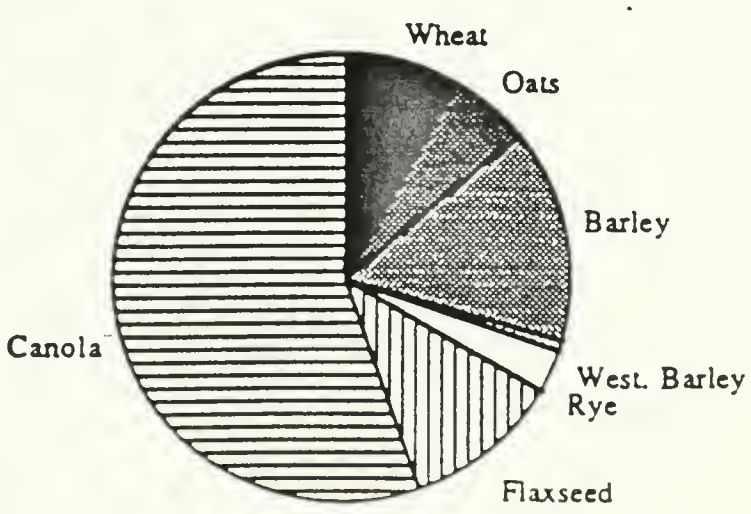


TABLE 4

THE WINNIPEG COMMODITY EXCHANGE
MONTHLY VOLUME OF SALES BY COMMODITY

1990/91	WHEAT	OATS	BARLEY	WESTERN BARLEY	RYE	CANOLA	FLAXSEED	TOTAL
August	11,064	3,010	12,039	1,115	3,741	61,642	8,990	101,601
September	18,949	4,066	18,294	1,212	2,415	56,933	9,399	111,268
October	17,777	3,972	12,453	1,625	2,146	57,302	10,476	105,751
November	10,813	4,550	14,694	722	2,472	49,450	13,111	95,812
December	5,540	3,351	8,637	1,491	1,362	58,994	5,930	85,305
January	15,728	2,885	9,131	1,507	1,984	67,489	13,176	111,900
February	7,763	1,950	7,233	570	2,338	59,380	10,173	89,407
March	6,938	3,375	6,156	942	1,631	64,193	10,783	94,018
April	7,429	2,155	9,823	1,589	2,371	67,572	15,132	106,071
May	9,346	1,744	9,722	737	815	68,849	6,696	97,909
June	9,826	2,233	9,554	509	2,186	59,270	10,257	93,835
July	14,753	2,837	10,694	1,962	1,201	90,575	9,909	131,931
Total	135,926	36,128	128,430	13,981	24,662	761,649	124,032	1,224,808

THE WINNIPEG COMMODITY EXCHANGE
MONTH END OPEN INTEREST

1990/91	WHEAT	OATS	BARLEY	WESTERN BARLEY	RYE	CANOLA	FLAXSEED	TOTAL
August	11,225	3,195	11,292	1,630	3,069	21,211	4,158	55,780
September	10,913	4,015	12,718	1,922	2,748	28,348	5,057	65,721
October	9,571	2,644	10,564	2,005	2,296	21,833	4,441	53,354
November	9,991	2,201	7,979	2,015	1,925	19,118	5,192	48,421
December	9,842	2,490	7,158	1,926	1,742	23,700	4,081	50,939
January	7,008	2,232	6,940	1,596	1,778	21,376	3,831	44,761
February	7,541	1,997	6,793	871	2,147	22,676	4,316	46,341
March	6,697	1,683	6,107	1,094	1,722	26,565	4,584	48,452
April	7,579	1,632	7,064	1,421	1,454	28,439	4,865	52,454
May	7,486	1,908	5,888	950	1,119	30,137	4,057	51,545
June	8,022	2,160	6,300	1,110	1,077	26,440	5,397	50,496
July	9,021	2,839	6,650	1,143	1,171	28,174	5,657	54,655
Average	7,944	2,416	7,954	1,473	1,854	24,835	4,636	51,910

THE WINNIPEG COMMODITY EXCHANGE 1990/91 VOLUME
Comparison by Commodity

1990 / 1991

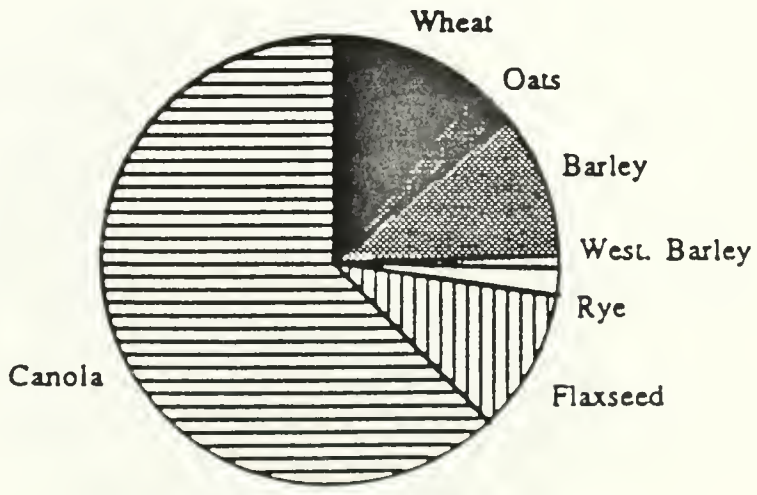


TABLE 5

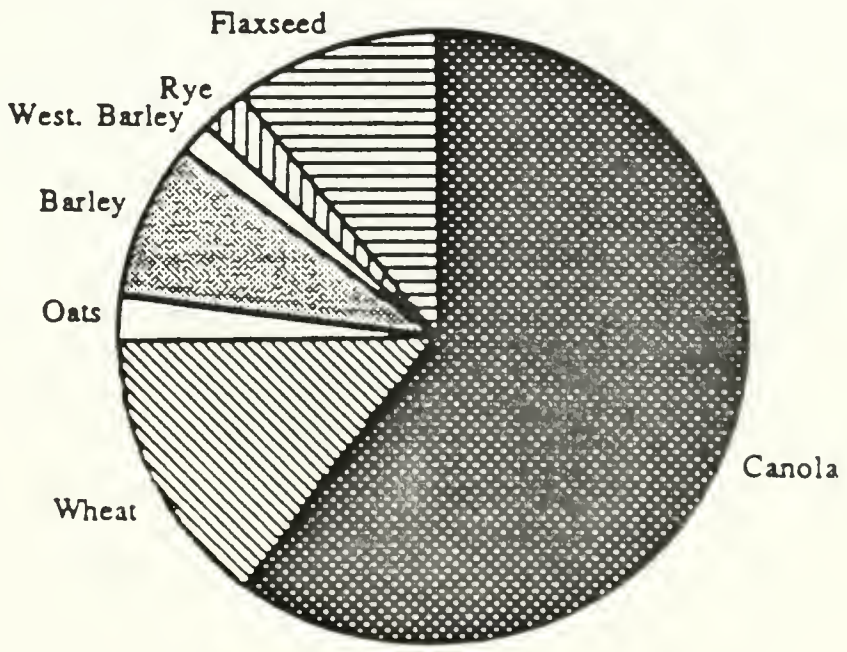
THE WINNIPEG COMMODITY EXCHANGE
MONTHLY VOLUME OF SALES BY COMMODITY

1991/92	WHEAT	OATS	BARLEY	WESTERN BARLEY	RYE	CANOLA	FLAXSEED	TOTAL
August	10,484	1,705	8,198	2,242	2,645	65,541	6,882	97,697
September	10,796	1,897	9,660	879	3,200	76,966	10,771	114,169
October	18,513	1,604	8,406	1,938	2,019	75,457	12,267	120,204
November	10,102	1,269	12,051	1,025	2,222	53,660	10,774	91,103
December	10,268	973	5,933	968	752	66,421	5,420	90,735
January	18,976	947	7,276	975	2,229	57,429	14,790	102,622
February	26,679	4,768	11,801	607	4,510	54,546	14,078	116,989
March	16,133	5,069	8,029	1,539	1,967	57,174	13,016	102,927
April	18,518	4,134	9,822	2,422	2,695	38,674	12,627	88,892
May	14,416	2,550	6,458	2,664	1,592	87,638	8,052	123,370
June	17,337	3,002	8,387	1,747	2,869	75,018	14,034	122,394
July	12,083	2,486	8,648	2,716	1,023	50,157	10,004	87,117
Total	184,305	30,404	104,669	19,722	27,723	758,681	132,715	1,258,219

THE WINNIPEG COMMODITY EXCHANGE
MONTH END OPEN INTEREST

1991/92	WHEAT	OATS	BARLEY	WESTERN BARLEY	RYE	CANOLA	FLAXSEED	TOTAL
August	8,327	2,694	5,987	1,252	1,434	25,851	6,358	51,903
September	9,509	2,548	6,235	1,466	1,691	30,149	6,053	57,651
October	11,166	1,054	5,886	1,598	2,158	26,480	5,581	53,923
November	10,366	736	6,948	886	1,340	22,235	6,120	48,631
December	9,519	651	5,685	1,066	1,112	18,657	4,914	41,604
January	9,470	832	5,247	782	1,357	15,828	6,276	39,792
February	12,588	2,699	6,422	716	2,363	19,719	7,801	52,308
March	13,613	4,690	6,398	1,268	2,141	22,172	7,771	58,053
April	12,773	4,452	5,830	1,927	2,075	21,372	7,925	56,354
May	10,916	4,921	5,275	2,551	2,005	26,828	7,555	60,051
June	8,926	4,533	5,229	2,993	1,565	26,534	6,839	56,619
July	7,914	5,040	4,516	3,330	1,576	25,873	6,627	54,876
Average	10,424	2,904	5,805	1,653	1,735	23,475	6,652	52,647

THE WINNIPEG COMMODITY EXCHANGE 1991/92 VOLUME
Comparison by Commodity



1991 / 1992

TABLE 6

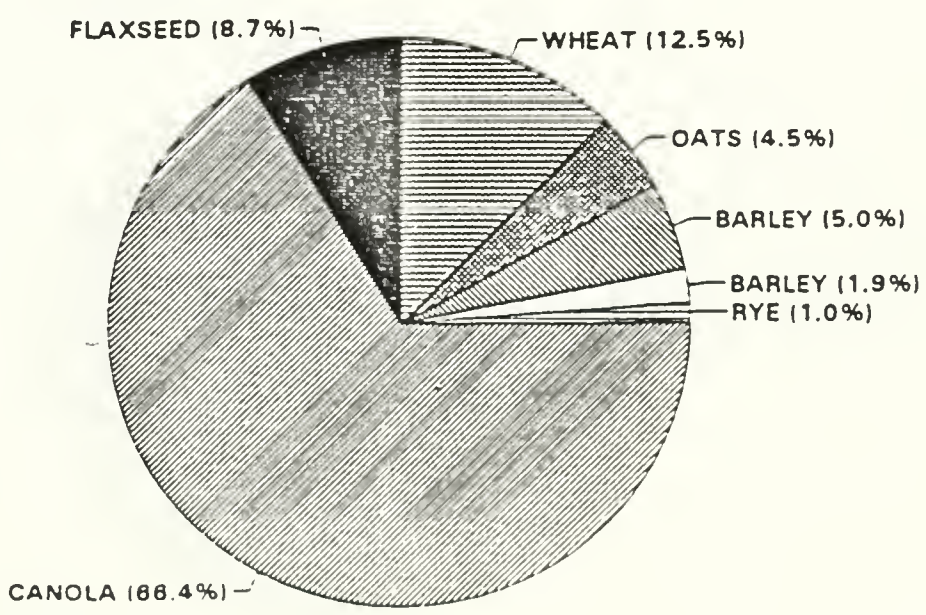
THE WINNIPEG COMMODITY EXCHANGE
MONTHLY VOLUME OF SALES BY COMMODITY

1992/93	WHEAT	OATS	BARLEY	WESTERN BARLEY	RYE	CANOLA	FLAXSEED	TOTAL
August	13,342	3,448	4,230	1,738	2,711	72,971	10,992	109,432
September	15,277	5,736	6,240	2,180	2,607	79,034	15,204	126,278
October	13,964	4,572	5,181	3,053	1,097	93,692	10,313	131,872
November	17,883	4,586	7,991	1,667	1,861	99,577	13,536	147,101
December	14,452	4,615	4,087	1,347	1,112	73,805	7,935	107,353
January	15,628	3,244	6,024	1,687	611	73,411	6,298	106,903
February	11,746	6,176	7,164	1,434	1,484	74,362	13,869	116,235
March	12,253	7,228	5,069	2,327	423	63,737	6,129	97,166
April	10,251	8,915	4,650	2,372	872	73,358	11,282	111,700
May	12,054	5,053	4,204	1,702	604	61,996	8,623	94,236
June	18,120	4,069	6,514	3,144	652	70,117	8,979	111,595
July	19,665	5,588	8,297	4,038	421	94,286	9,481	141,776
Total	174,635	63,230	69,651	26,689	14,455	930,346	122,641	1,401,647

THE WINNIPEG COMMODITY EXCHANGE
MONTH END OPEN INTEREST

1992/93	WHEAT	OATS	BARLEY	WESTERN BARLEY	RYE	CANOLA	FLAXSEED	TOTAL
August	8,035	5,045	4,182	2,820	1,625	25,228	6,624	53,559
September	8,500	3,486	4,660	3,277	1,285	30,060	5,019	56,287
October	10,004	2,975	4,296	2,425	1,178	34,503	5,875	61,256
November	11,525	3,203	5,084	1,529	907	37,772	6,611	66,631
December	10,696	3,045	4,618	1,724	1,073	35,859	7,096	64,111
January	12,012	4,074	6,448	1,200	794	34,640	8,255	67,423
February	11,741	4,497	7,310	1,018	1,115	37,607	8,049	71,337
March	9,895	5,366	5,860	1,938	781	34,978	5,636	64,454
April	10,673	5,569	5,348	2,684	951	38,720	5,983	69,928
May	10,872	4,349	4,995	3,252	763	32,888	5,613	62,732
June	11,057	4,447	4,325	2,969	777	33,284	4,876	61,735
July	10,681	4,721	3,412	2,238	634	41,722	5,374	68,782
Average	10,474	4,231	5,045	2,256	990	34,772	6,251	64,020

THE WINNIPEG COMMODITY EXCHANGE 1992/93 VOLUME COMPARISON BY COMMODITY



1992 / 1993

TABLE 7

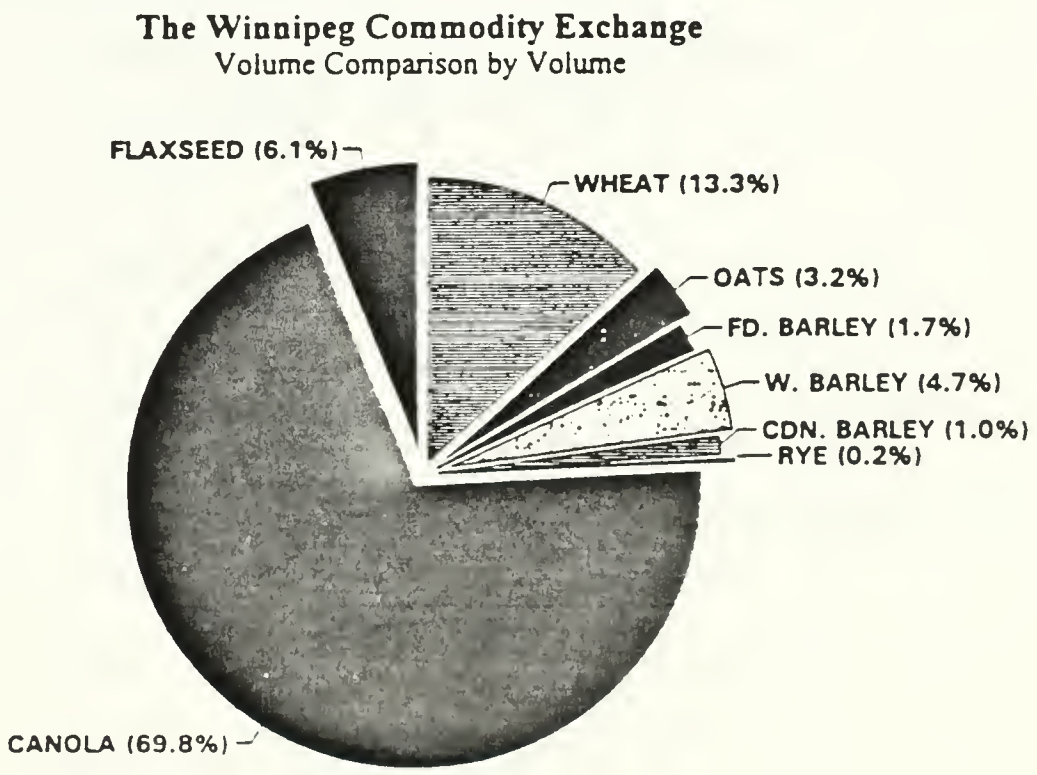
THE WINNIPEG COMMODITY EXCHANGE
MONTHLY VOLUME OF SALES BY COMMODITY

1993/94	WHEAT	OATS	FEED BARLEY	WESTERN BARLEY	CANADIAN BARLEY	RYE	CANOLA	FLAXSEED	TOTAL
August	18,244	2,064	5,651	3,470		736	77,325	7,171	114,661
September	21,591	4,337	4,864	4,526		761	89,947	4,708	130,734
October	17,165	4,029	3,483	4,340		182	73,953	7,891	111,043
November	31,565	4,893	5,487	5,917	2,734	801	107,485	10,541	169,423
December	21,792	3,648	2,236	5,291	1,416	282	112,377	9,138	156,180
January	22,692	5,061	2,158	7,834	1,464	247	119,691	10,671	169,818
February	13,155	2,345	1,387	4,107	1,322	192	102,717	7,839	133,064
March	15,359	11,547	1,134	6,984	1,413	189	85,125	9,929	131,680
April	14,974	2,901	531	9,859	2,068	216	100,923	8,553	140,025
May	10,940	3,276	168	7,135	1,443	23	111,962	6,103	141,050
June	16,496	4,967		6,448	2,786	35	79,307	9,389	119,428
July	14,345	3,086		11,321	2,250	30	83,903	7,580	122,515
Total	218,318	52,154	27,099	77,232	16,896	3,694	1,144,715	99,513	1,639,621

THE WINNIPEG COMMODITY EXCHANGE
MONTH END OPEN INTEREST

1993/94	WHEAT	OATS	FEED BARLEY	WESTERN BARLEY	CANADIAN BARLEY	RYE	CANOLA	FLAXSEED	TOTAL
August	12,944	4,118	2,550	2,268		626	46,006	5,691	74,203
September	13,224	3,617	2,890	3,156		515	56,377	5,968	85,747
October	11,913	4,270	2,837	3,629		451	51,590	3,485	78,175
November	12,451	4,810	2,371	5,759	1,145	554	58,949	4,155	90,194
December	14,434	4,946	2,082	6,738	843	451	49,212	5,006	83,712
January	13,618	6,336	1,704	7,879	989	475	54,398	6,119	91,518
February	11,725	5,934	1,156	8,159	1,310	409	55,238	6,509	90,440
March	10,729	6,595	378	7,486	1,777	174	57,625	6,052	90,816
April	13,351	5,894	177	8,448	1,469	79	58,643	5,329	93,390
May	12,112	5,857	0	8,114	1,860	46	58,911	3,647	90,547
June	11,274	6,284		9,655	2,049	28	52,976	3,881	86,147
July	12,172	5,923		7,898	2,229	40	57,160	4,562	89,984
Average	12,496	5,382	1,794	6,599	1,519	321	54,757	5,034	87,073

THE WINNIPEG COMMODITY EXCHANGE 1993/94 VOLUME COMPARISON BY COMMODITY



1993 / 1994

TABLE 8

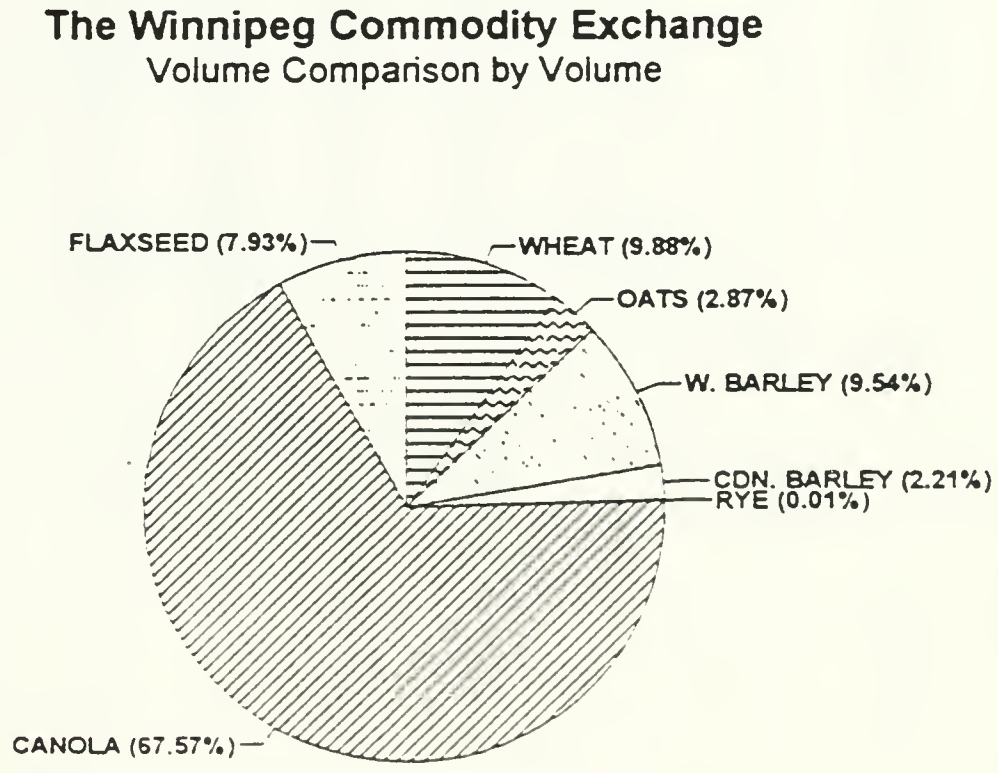
THE WINNIPEG COMMODITY EXCHANGE
MONTHLY VOLUME OF SALES BY COMMODITY

1994/95	WHEAT	OATS	WESTERN BARLEY	CANADIAN BARLEY	RYE	CANOLA	FLAXSEED	TOTAL
August	12,846	3,631	5,385	1,948	27	95,712	4,455	124,004
September	21,932	4,387	16,134	5,034	23	102,233	6,580	156,323
October	17,756	3,637	16,774	3,874	10	87,350	12,415	141,816
November	17,737	5,000	15,959	5,537	25	101,727	15,820	161,805
December	13,464	2,712	7,436	2,461	5	96,797	6,004	128,879
January	10,393	2,496	13,930	1,850	0	75,068	10,707	114,444
February	10,515	2,342	8,657	2,446	0	87,113	15,819	126,892
March	8,314	6,030	16,527	3,117	32	86,340	10,676	131,036
April	7,828	3,481	12,477	2,553	0	67,937	15,315	109,591
May	10,164	4,631	11,397	2,161	10	95,447	12,569	136,379
June	15,331	4,698	14,955	2,789	20	85,126	9,235	132,154
July	10,929	2,611	12,214	1,357	12	94,576	6,579	128,278
Total	157,209	45,656	151,845	35,127	164	1,075,426	126,174	1,591,601

THE WINNIPEG COMMODITY EXCHANGE
MONTH END OPEN INTEREST

1994/95	WHEAT	OATS	WESTERN BARLEY	CANADIAN BARLEY	RYE	CANOLA	FLAXSEED	TOTAL
August	15,769	5,226	9,048	2,427	23	56,182	5,230	93,905
September	14,534	3,879	10,910	3,318	25	54,893	4,046	91,605
October	11,580	3,412	12,122	4,259	15	52,963	3,711	88,062
November	10,936	2,749	10,171	2,889	25	53,118	5,712	85,600
December	11,208	2,641	8,985	2,625	20	45,607	5,582	76,668
January	11,685	4,076	9,054	2,156	20	47,644	7,615	82,250
February	10,830	3,549	10,503	1,782	20	37,436	8,767	72,887
March	10,278	3,976	9,944	1,451	42	30,672	6,670	63,033
April	10,254	3,550	7,877	1,119	42	34,405	8,599	65,846
May	9,543	3,595	8,021	1,197	22	39,736	7,666	69,780
June	10,063	3,272	8,857	1,023	32	43,476	7,199	73,922
July	8,591	2,833	9,663	894	15	42,788	5,899	70,683
Average	11,273	3,563	9,596	2,095	25	44,910	6,391	77,853

THE WINNIPEG COMMODITY EXCHANGE 1994/95 VOLUME COMPARISON BY COMMODITY



MONTHLY OPTIONS VOLUME TABLE 9

CROP YEAR	MONTH	CANOLA CALLS	CANOLA PUTS	FEED WHEAT CALLS	FEED WHEAT PUTS	FLAXSEED CALLS	FLAXSEED PUTS	CANADIAN BARLEY CALLS	CANADIAN BARLEY PUTS	WESTERN BARLEY CALLS	WESTERN BARLEY PUTS	TOTAL
1991/92	AUGUST											
	SEPTEMBER	568	396									964
	OCTOBER	614	123									737
	NOVEMBER	1,013	53									1,066
	DECEMBER	2,076	50									2,126
	JANUARY	1,502	89									1,591
	FEBRUARY	1,157	167									1,324
	MARCH	2,278	344									2,622
	APRIL	1,595	232	317	0							2,144
	MAY	4,435	719	240	7							5,401
	JUNE	4,829	1,439	281	15							6,564
	JULY	2,038	515	236	75							2,864
1992/93	AUGUST	3,423	1,152	99	92							4,766
	SEPTEMBER	3,933	3,844	109	330							8,216
	OCTOBER	2,103	921	35	10							3,069
	NOVEMBER	1,626	2,152	281	75							4,134
	DECEMBER	2,441	499	33	10							2,983
	JANUARY	1,217	433	65	55							1,770
	FEBRUARY	2,049	675	863	0	600	119					4,306
	MARCH	2,432	243	556	5	593	52					3,881
	APRIL	2,402	644	135	0	508	47					3,736
	MAY	1,462	965	268	20	448	6					3,169
	JUNE	1,469	1,114	658	905	156	50					4,352
	JULY	5,655	1,920	307	104	604	251					8,841
1993/94	AUGUST	5,650	1,475	548	73	740	107					8,593
	SEPTEMBER	2,979	693	30	22	203	105					4,032
	OCTOBER	931	1,341	5	0	91	4					2,372
	NOVEMBER	686	475	62	0	58	40					1,321
	DECEMBER	4,291	2,985	593	0	139	0	80	0	10	0	8,098
	JANUARY	4,354	2,482	260	0	110	5	0	0	10	0	7,221
	FEBRUARY	2,737	1,568	275	0	28	0	0	0	10	0	4,616
	MARCH	4,719	2,141	768	0	30	13	0	0	280	0	7,959
	APRIL	4,905	4,271	605	5	339	14	0	0	308	0	10,447
	MAY	5,595	4,524	66	0	146	16	0	0	110	0	10,457
	JUNE	4,319	3,092	59	0	215	19	0	0	326	0	8,030
	JULY	3,817	2,650	62	0	20	19	0	0	185	0	6,753
1994/95	AUGUST	1,577	3,706	451	0	155	20	0	0	40	0	5,949
	SEPTEMBER	3,870	2,919	438	20	28	28	0	0	176	0	7,479
	OCTOBER	3,074	3,458	41	30	97	78	0	0	241	0	7,019
	NOVEMBER	2,245	3,818	25	20	53	21	0	0	15	0	6,197
	DECEMBER	3,602	2,422	22	0	221	19	0	0	5	0	6,291
	JANUARY	2,873	2,819	17	93	39	99	0	0	25	0	5,965
	FEBRUARY	1,998	1,745	0	45	115	97	420	0	0	0	4,420
	MARCH	4,474	3,712	0	61	45	38	15	0	0	0	8,345
	APRIL	3,195	1,999	0	18	74	170	0	0	5	0	5,461
	MAY	2,812	2,987	13	110	235	66	0	0	0	63	6,086
	JUNE	3,373	2,978	5	69	10	26	0	0	10	10	6,481
	JULY	3,167	1,397	17	13	21	39	0	0	10	37	4,701
1995/96	AUGUST	2,592	2,421	100	17	38	13	0	0	0	7	5,188
	SEPTEMBER	4,700	3,109	0	7	304	11	0	0	0	0	8,131
	OCTOBER	3,289	2,790	106	37	27	0	0	0	0	107	6,356
	NOVEMBER	2,871	4,294	1	5	78	0	0	0	0	0	7,249
	DECEMBER	4,058	2,572	0	0	11	11	0	0	0	0	6,652
	JANUARY	5,275	1,629	0	0	30	15			30	350	7,329
	FEBRUARY	4,099	3,419	0	0	57	3			0	0	7,578
	MARCH	2,929	502	0	0	15	10			10	25	3,491
	APRIL	4,228	2,682	16		17	10			211	1,705	8,869
	MAY											

MONTHLY OPTIONS OPEN INTEREST TABLE 10

CROP YEAR	DATE	CANOLA CALLS	CANOLA PUTS	FEED WHEAT CALLS	FEED WHEAT PUTS	FLAXSEED CALLS	FLAXSEED PUTS	CANADIAN BARLEY CALLS	CANADIAN BARLEY PUTS	WESTERN BARLEY CALLS	WESTERN BARLEY PUTS	TOTAL
1991/92	AUGUST											
	SEPTEMBER	225	232									457
	OCTOBER	519	55									574
	NOVEMBER	1,487	92									1,579
	DECEMBER	2,908	80									2,988
	JANUARY	3,611	107									3,718
	FEBRUARY	4,136	196									4,332
	MARCH	5,008	482									5,490
	APRIL	5,954	541	252	0							6,747
	MAY	3,586	673	410	7							4,676
	JUNE	7,093	1,906	434	12							9,445
	JULY	8,303	1,930	553	87							10,873
1992/93	AUGUST	1,797	1,140	633	165							3,735
	SEPTEMBER	2,622	2,647	150	61							5,480
	OCTOBER	2,372	984	175	51							3,582
	NOVEMBER	2,286	2,002	272	50							4,610
	DECEMBER	2,863	822	285	60							4,030
	JANUARY	3,176	1,035	305	105							4,621
	FEBRUARY	3,298	703	721	95	523	119					5,459
	MARCH	5,309	908	1,142	100	1,042	133					8,634
	APRIL	7,089	1,013	1,069	65	1,263	131					10,610
	MAY	3,729	955	1,274	75	1,293	137					7,463
	JUNE	4,668	1,813	1,450	910	360	123					9,324
	JULY	6,915	3,101	1,554	975	783	223					13,551
1993/94	AUGUST	5,718	1,919	1,997	1,013	1,238	192					12,075
	SEPTEMBER	6,445	2,001	602	154	358	170					9,730
	OCTOBER	844	615	597	154	399	170					2,779
	NOVEMBER	726	955	55	0	55	0					1,791
	DECEMBER	2,493	2,073	610	0	182	0	70	0	0	0	5,428
	JANUARY	3,619	3,153	570	0	277	5	70	0	10	0	7,704
	FEBRUARY	3,783	1,713	608	0	85	5	70	0	20	0	6,284
	MARCH	5,578	3,041	1,042	0	113	18	70	0	285	0	10,147
	APRIL	6,747	5,437	1,244	5	275	32	0	0	593	0	14,333
	MAY	6,384	6,199	1,300	5	392	43	0	0	678	0	15,001
	JUNE	8,533	7,975	758	5	291	62	0	0	909	0	18,533
	JULY	5,584	7,252	809	5	271	76	0	0	829	0	14,826
1994/95	AUGUST	4,380	7,693	759	5	426	88	0	0	869	0	14,220
	SEPTEMBER	6,638	8,336	169	20	263	78	0	0	491	0	15,995
	OCTOBER	3,365	3,942	127	20	293	137	0	0	80	0	7,964
	NOVEMBER	3,647	6,549	44	30	75	36	0	0	90	0	10,471
	DECEMBER	2,858	3,254	32	30	240	53	0	0	50	0	6,517
	JANUARY	4,221	5,201	45	122	240	152	0	0	0	0	9,981
	FEBRUARY	2,554	3,147	25	156	78	85	385	0	0	0	6,430
	MARCH	5,490	5,615	25	217	97	123	350	0	0	0	11,917
	APRIL	7,189	5,796	25	232	97	188	0	0	5	0	13,532
	MAY	4,756	4,452	8	342	317	200	0	0	5	58	10,138
	JUNE	5,626	6,153	8	366	288	141	0	0	5	68	12,655
	JULY	5,879	8,444	21	379	303	161	0	0	0	85	13,272
1995/96	AUGUST	7,319	6,658	121	396	341	164	0	0	0	92	15,091
	SEPTEMBER	8,520	6,481	105	36	203	117	0	0	0	92	15,554
	OCTOBER	3,523	2,172	6	73	218	117	0	0	0	101	6,210
	NOVEMBER	3,952	3,283	5	5	15	0	0	0	0	101	7,361
	DECEMBER	4,980	3,559	5	5	21	11	0	0	0	101	8,682
	JANUARY	7,339	4,711	5	5	46	26			30	275	12,437
	FEBRUARY	4,828	4,331	0	0	72	20			30	275	9,556
	MARCH	6,288	4,679	0	0	87	10			40	300	11,404
	APRIL	5,953	6,876	18		41	0			41	1,440	14,367
	MAY											
	JUNE											
	JULY											

Table 11
Futures Trade Data Used in FIGURE 1

Year	Total Transaction [1]	Total Open Interest [2]	Total Volume [3]
1975/76	959,917	15,998	
1976/77	1,029,992	17,166	
1977/78	1,341,026	22,350	
1978/79	2,052,469	37,317	
1979/80	2,250,758	40,923	
1980/81	2,259,229	41,077	
1981/82	1,581,793	28,760	
1982/83	1,625,141	32,503	
1983/84	2,001,824	44,485	
1984/85	1,835,509	40,789	
1985/86	1,787,290	49,717	
1986/87	2,272,866	64,939	
1987/88	2,791,073	94,640	1,620,236
1988/89	2,955,444	92,343	1,512,050
1989/90	2,638,284	64,133	1,297,070
1990/91	2,496,164	65,721	1,224,808
1991/92	2,435,480	60,051	1,258,219
1992/93	2,705,275	71,337	1,401,647
1993/94	3,375,031	93,390	1,639,621
1994/95	3,263,047	93,905	1,598,601
1995/96	3,500,000	100,000	1,700,000

[1] Total Transactions included all trading floor and all associated transactions for for all futures contracts.

[2] Total Open Interest is the highest month end open interest in each year.

[3] Total Volume: prior to 1988/89 volume of trade published included the following transactions: all broker allocations, "give-ups" and exchanges of futures for physicals. These transactions are no longer included in the volume figures.

CANADIAN CANOLA GROWERS ASSOCIATION

Co-ordinating British Columbia, Alberta, Saskatchewan, Manitoba and Ontario Associations

Together With
The Western Canadian Wheat Growers and the Western Barley Growers Associations

Board of Governors
Winnipeg Commodity Exchange

April 13, 1995
By Fax

Attention: Mr. Curt Vossen, Chairman

Re: Restructuring of the Canola Futures Contract

This letter is to inform you of our concerns regarding the recommendations for restructuring the canola futures contract as proposed by the Chairman/Consultant of the Canola Task Force. These recommendations, we understand, contemplate not only changes to the delivery mechanism (which is the main problem of the futures contract), but also to the relocation of the par pricing point from Vancouver to a yet to be defined Saskatchewan point and/or region.

Our group representing the majority of the farmer stakeholders and other concerned members in the canola/grain industry must place on record our response to these contemplated recommendations for the potential restructuring of the canola futures contract. We wish to state that we agree with the necessity of developing an effective futures contract delivery mechanism thereby creating a real threat of futures delivery based on integrity of supply. This will insure that cash/futures prices are correlated and and will converge upon contract maturity. We strongly object however to the recommendation regarding the potential removal of Vancouver as the par pricing point for the canola futures contract.

Our assessment of the canola futures contract problems is that the contract has become fundamentally flawed due to the highly restricted opportunity to make or take delivery against the futures and not due to the pricing point. This finding is further supported by other informed knowledgeable observers and market participants. Just how fundamentally flawed the contract had become was amply demonstrated by the June 1994 canola futures expiry. It follows, therefore, that a logical and prudent approach to solving the futures delivery problem is to correct the delivery mechanism in order to enhance the threat of delivery and therefore cash/futures price convergence. This does not require or necessitate removing Vancouver as the par pricing point.

Vancouver is the largest consumptive point/cash market for canola. It is where the dominant export demand/competition for canola is concentrated and manifested in the cash market through the spot and forward cash trading activity basis Vancouver. The cash market activity drives/leads the entire canola market (export/domestic cash and futures) and will continue to do so for the forseeable future. Therefore Vancouver must be and remain the par pricing point for the canola futures market in order that the dominant Vancouver cash market activity/prices are transparent and realistically/directly reflected in and correlated with the futures market at all times.

c/o 400 - 167 Lombard Avenue, Winnipeg, Manitoba R3B 0T6 (204) 982-2100 Fax (204) 942 - 1841

To better accommodate the domestic crusher demand which is smaller and widely dispersed on the prairies relative to the export demand, all the prairie crusher locations must be included as additional futures delivery areas linked to Vancouver. Such a network of delivery locations would concentrate the crusher influence on the futures/cash prices. Prairie crushers would then be able to directly participate in the futures delivery and cash/futures arbitrage process on both the long and short side and thereby have a greater and more concentrated influence on and improved utilization of the canola market. This domestic consumptive demand must be allowed to function in tandem and be closely linked with the on-going export demand reflected in the Vancouver cash market. These delivery points/areas would be backed off by transportation/market discounts from Vancouver futures values (basis on-track) for the purposes of pricing futures deliveries in these areas using fob warrants/delivery certificates.

This enhanced prairie delivery network incorporating all the prairie crusher locations and an effective delivery mechanism (creating a real threat of delivery) will result in futures prices reflecting the full and balanced influences of both the concentrated export and the dispersed domestic cash markets. The basis to crushers and exporters will also become smaller, more predictable and stable due to the improved correlation between the futures and cash markets. These desired results achieve the main objective of restructuring the canola futures contract -- that is, to have an efficient price discovery and hedging instrument that can be confidently used by all market participants.

Our acute concern about the proposed par pricing location change is that it will impact negatively on the cash values of canola net of transportation/transaction costs and the functioning of the futures market. Before our group would even seriously consider a par pricing point change from Vancouver to the prairies, there must be a full and thorough study encompassing a number of competitive and other market-related factors on the effectiveness of a prairie par pricing point for the futures market and its impact on canola values. This study will also be important in light of upcoming transportation deregulation and other related changes to determine their impacts. In the meantime, with Vancouver remaining as the par pricing point for the canola contract, it is highly desirable to implement the new delivery mechanism involving fob warrants/delivery certificates, more latitude in uncleaned deliverable grades, and greater potential for direct participation of prairie crushers in the futures delivery process. The new canola futures contract can then be monitored to ascertain how effectively it enhances the cash/futures canola price relationships and by extension the price discovery and risk transference functions of the futures market.

In conclusion we wish to emphasize our concerns that changing the par pricing point to the prairies will dislocate and harm the canola futures marke thereby offsetting potential benefits contemplated from altering the futures delivery mechanism. A par Saskatchewan point or region for example will have the effect of reducing the influence of the dominant export demand by masking the Vancouver cash market, thus potentially weakening competition and prices. The futures will become negatively biased in favour of the shorts. Consequently the market will be supply pushed rather than demand pulled. It will also increase both the basis and the basis risk over what it would be otherwise because the futures market would not cover the market factors including transportation risks and efficiencies between the inland par point and the Vancouver cash market. These potential undesirable results are contrary to proper futures market function and design and are at odds with the new transportation deregulation regime which is to be market driven. All of these consequences would interact to inhibit the effectiveness of the futures contract

The risks of such potential unfavourable consequences relative to perceived benefits are high. Therefore caution/prudence strongly suggests that dislocating the futures par pricing point would be ill-advised without first undertaking the above recommended in-depth market impact/risk assessment of such a change – while simultaneously monitoring the effects of the futures delivery enhancements implemented with the present par pricing point on canola cash/futures price relationships. Having the potential of another fundamentally compromised and dysfunctional canola futures market is not the goal of this important contract restructuring process and is certainly not in the best interests of the Exchange and the canola industry.

Yours sincerely,

Doug Sword
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Former President
Western Barley Growers Association

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CANADIAN CANOLA GROWERS ASSOCIATION

Co-ordinating British Columbia, Alberta, Saskatchewan, Manitoba and Ontario Associations

Together With
The Western Canadian Wheat Growers and the Western Barley Growers Associations and Supporting Organizations

June 30, 1995

Mr. R. A. Groundwater
Assistant Chief Commissioner
Canadian Grain Commission

Dear Mr. Groundwater:

Re: Canola Futures Contract Restructuring

We appreciated the opportunity to meet the Commission on June 19th to discuss our group's concerns with respect to potential changes in the canola futures contract and the process the Exchange has followed regarding this matter. It is unfortunate, however that we did not see (for our review and comment) your draft and final letter outlining our concerns prior to these correspondences being forwarded to the Exchange. This would have given us the opportunity to correct any misunderstandings of our views and in some cases place different emphasis on other points which we found in your June 22 letter to the W.C.E.

Rather than review your letter point by point, we wish to simply state our group's concerns and position on this whole matter of the canola futures contract restructuring and the process that has been adopted this far. They are as follows:

1. Our group made up of all the canola growers associations (Man., Sask., Alta., B.C.) and other commodity associations (Flax, Wheat, Barley) together with several supporting organizations advocate the need to enhance the threat of delivery by improving the canola futures contract's delivery mechanism and thus cash/futures convergence. This need was amply demonstrated by the June 1994 expiry problems which were brought on by the G.T.A.'s ship to sales regulations (restricting the grain trade's ability to deliver) and the imposition of the cash call market (restricting the farmer's ability to deliver). It is the opinion of the Canola Task Force and Dr. Pirrong of Catalyst Consulting, that introducing a FOB warrant delivery future system will improve the threat of delivery and largely resolve the problems involving the lack of cash/futures convergence. The FOB warrant delivery system is also consistent with the throughput nature of the cash market which together with expanded delivery points should improve the price discovery and hedging functions of the futures market.

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2. The group contends however that dislocating the par pricing point from Vancouver to Saskatoon is not warranted from either a market or technical point of view. Such a change was not recommended by the Catalyst study which was based on solid and thorough economic analysis. The G.MC./Martin report, on the other hand, recommended such a par price point change based on anecdotal information and assertion. This recommendation was not supported by the farmers and small shipper representation on the task force.

3. It is our further contention and position that the farm community and the canola industry must have the opportunity to assess the impacts of the new FOB warrant delivery system on the Vancouver par pricing point. This is also important given the pending deregulation of the grain transportation system. Changing too many variables at the same time (particularly the par pricing point) will not provide the necessary important bench mark(s) required to assess how and to what degree the futures contract's price discovery, hedging and merchandising functions have been improved.

4. Before any future change of the par pricing point from Vancouver to an area around Saskatoon is made, there must be a thorough study having the following four elements.

- A market analysis of future export demands through Vancouver relative to future North American demand for Canadian canola – given the removal of the crow rate rail subsidy, the inherent price volatility of canola and the relative price elasticities of the demand (both export and domestic).

- A study of the cash futures convergence patterns following the introduction of the FOB warrant delivery system together with other delivery specification changes such as allowing delivery of uncleaned canola. This study will necessitate recording/monitoring the export/domestic canola cash prices, basis behavior, market liquidity improvements as well as price discovery and hedging performance for both domestic and export market participants.

- An assessment of market competition factors among Canadian and International market participants operating basis Vancouver versus Saskatoon as well as determination of the amount of cash trading carried out in each center now and in the future. The assessment should also determine the degree to which farmers can directly access the domestic crush/export markets and the proposed futures contract. The potential of direct access by farmers to major domestic crush and export positions as well a delivery against canola futures (together with the grain trade) is important for effective price competition. Transparency of the export and domestic crush cash markets to farmers is also a key variable in the competition equation.

- Impacts on canola prices to farmers should also be assessed as a consequence of a par pricing point change from Vancouver to Saskatoon. Early evidence of potential flat price reductions through wider than normal basis bids to the farmers are beginning to surface in what appears to be the cash market's anticipation of the potential par pricing point change. Such flat price reductions at the farm gate (if they systematically occur due to the proposed par pricing point change) will have the effect of subsidizing the grain trade (particularly the crushers) - all at the farmers expense. Reduced canola acreage and production as a result of these lower farm prices (relative to other crops) will have negative impacts on the future growth of exports and domestic crush and thus the industry. These potential consequences would not be in the best interests of the crusher, the merchandiser/exporter or the farmer - all of these key market participants have made significant investments in response to the strong demand for seed, oil and meal and as such are highly interdependent stakeholders in the canola market. What adversely affects one participant will ultimately affect, in a similar way, the others.

5. Our assessment of the progress of the Exchange's canola futures contract technical committee is as follows:

- The development of the FOB warrant delivery mechanism is sound and it is where our group has made a positive contribution as did the other members of the committee.

- The development of the par Saskatoon area has been difficult and will require a great deal of further work. Here political, competition factors and market share considerations appear to have interacted with principles and economic factors of good futures contract design.

6. Our group's concerns regarding the par Saskatoon delivery area for the proposed restructured canola futures contract has raised more questions than answers. These questions are as follows:

- What will be the level of competition and the supply/demand characteristics in this area?

- Who are the players and what are their relative shares with respect to their elevator storage capacities and handle of canola?

- Will they actively participate in the delivery process and how can farmers also participate?

- Is the Saskatoon par area open to manipulation? How effectively will alternative delivery areas in Alberta and Manitoba mitigate cash/futures convergence by creating a further threat of delivery - in addition to future deliveries in the par region? Are the premiums or discounts at appropriate levels to create the additional delivery threat?

- What class of street prices will this futures market discover and for whose benefit? How will the weighting of these prices be determined?

- How will the cash market prices (now essentially Sask's Pool street prices) be monitored in order to determine if there is cash/futures convergence? And by whom?

- Is the farmers interest well served to have the primary export demand become less transparent and secondary in the proposed contract?

- How does this contract insure that the export and domestic crush markets are transparent and reflected in this restructured futures contract?

- Is this proposed canola future contract design consistent with transportation deregulation and how will anticipated transportation efficiencies be reflected in the canola futures market?

- What assurance does the farmer have that dislocating the par pricing point to Saskatoon as part of the restructured canola future contract will not result in the lowering of the flat price to the farmer?

- Will the proposed futures contract serve as a world class price discovery/hedging market, and will international traders have confidence that this market reflects true export values that are not subject to manipulation given the grain industry's lopsided structure and competitive environment in Saskatchewan?

7 Sask. Pool has advocated the retention of Vancouver as an alternative delivery point and wish to see the Saskatoon par delivery area confined to a 50 km radius as opposed to the technical committees recommendation of 150 km. It is assumed that Sask. Pool's position on a smaller par delivery area is based on practical competitive considerations and not from any intent to adversely dominate the proposed restructured futures market (with Saskatoon as par) if it was introduced. Sask. Pool have indicated that they will not participate in the proposed future market if Vancouver is not a delivery point.

8. There are several organizations and grain company's that support our group's position (for the retention of Vancouver as the par pricing point and improving the delivery system by using FOB warrants) both in Canada and internationally including Japan, Australia and Germany.

9. Our position regarding Exchange's canola restructuring process is that we must be directly involved in the development or re-development of the canola industry's cash and futures market on an on going basis. (After all canola growers provide 100% of the Canadian canola and thereby collectively make up 50% of the canola market). Any criticism by our group of the present futures contract restructuring process is that the process is not complete. Furthermore any changes to the futures contract must be for the betterment of the canola industry and must not adversely affect any one of the market participants (farmers, merchandisers and processors) over another.

10. The prudent course of action that we strongly recommend is for the Exchange to implement the FOB warrant delivery system as recommended by the technical committee but maintain for now, Vancouver as the par pricing point. This course of action will allow us to monitor the improvements in the price discovery, hedging and merchandising functions of the canola futures market and undertake the necessary comprehensive study contemplated in point 4.

This completes the summary of our concerns and position with respect to the restructuring of the canola futures market. We will keep you informed of developments as they unfold and any actions our group may wish to take to insure our interests and that of the industry are protected. Thank you for your interest and concern in this matter.

Sincerely,

Douglas O. Ford

Douglas O. Ford
on behalf of the Canola Futures Contract Development Group and attendees of the June 19th meeting with the C.G.C. Bill Hetland, Bruce Delgano, Paul Orsak, Kevin Archibald and Douglas Ford.

cc: Ralph Goodale
Milt Wakefield
Jack Murta
Curt Vosson
Fred Siemens
Cornell Slade

DATE DUE

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