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# **Initial Price Policy of Canadian Wheat Board and Declining Barley Exports**

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**Initial Price Policy of Canadian Wheat Board  
and Declining Barley Exports**

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## **Initial Price Policy of Canadian Wheat Board and Declining Barley Exports**

This study examines initial barley price policy and other policies by the Canadian Wheat Board regarding CWB barley exports. CWB initial barley price, the percentage of final price paid to farmers initially for barley exported, has been declining, due to government reluctance to guarantee possible price short falls. This has resulted in lower CWB exports, higher non-CWB domestic supplies, and sometimes lower domestic price relative to world price. The objective of this study is to examine this and other problems, and point out alternatives which will diminish some of the feed barley export constraints. This should help ensure that feed barley revenues reflect the highest potential returns in international and domestic markets.

### **Feed Barley Export Challenges and Constraints**

The first major problem and constraint with feed barley marketing is that the CWB August initial payment as a proportion of the PRO (pool return outlook) has declined from 75-80 percent in 1993 to 1996, to 62-71 percent over the last three crop years. Although there have been numerous adjustments to the initial payments during these crop years, initial payments as portion of the PRO during the first half of the 1997-1999 crop years have remained lower than in previous years. The lower the initial payment as a proportion of the PRO, the lower the immediate cash flow to barley growers and therefore the lower the deliveries to the CWB pool and vice versa. Lower pool account volumes mean lower exports, more off-board domestic barley sales and/or higher carry-out stocks and therefore generally lower off-board prices. This represents a loss to barley growers.

In 2000-01, the initial payment for feed barley was set at 71 percent of the July 2000 PRO, or \$95 a tonne in-store Vancouver/St. Lawrence (I/S VC/SL). This lower initial payment level is expected to limit producer deliveries to the CWB feed barley pool account in 2000-01. Therefore, marketing alternatives are needed to overcome this constraint. Pooling price arbitrage problems are not expected to be significant in 2000-01, primarily because of the impact of lower corn prices on the coarse grain complex.

A second problem and constraint is that there is no effective arbitrage between international cash barley prices and CWB feed barley pool returns. In other words, international prices may be higher than domestic prices during certain periods, but the producer is unable to realize these higher prices. If international cash feed barley prices rise during the crop year, the PRO will not rise as quickly or as high as international cash barley prices because the CWB PRO is an average of all sales prices during the crop year. This reduces the volume of feed barley delivered to the CWB below the level that would be delivered if producers were able to arbitrage the higher prices. This increases the volume sold in the off-board market and/or increases carry-out stocks. This not only reduces returns in the CWB pool account, but can also

reduce domestic off-board prices resulting in a loss of income to barley producers. ... “in a rising market scenario, particularly in tight domestic supply situations, the CWB is at times unable to originate sufficient feed barley supplies to service higher value offshore markets due to an inability to provide a clear and nearby price signal from offshore markets to farmers relative to the off-board domestic feed market.” (The Role of the Canadian Wheat Board in the Grain Marketing System, Brief to the Western Grain Marketing Panel, February 23, 1996)

Problems with pooling price arbitrage potentially reduce CWB feed barley pool deliveries when international cash prices are rising and are higher than the PRO and domestic off-board prices basis on-farm. However, domestic off-board prices have been stronger than international barley prices for much of the period since the beginning of 1997-98, basis on-farm in major surplus growing regions in western Canada, and overall barley prices have generally been falling since 1995-96. As a result, pooling price arbitrage problems has not likely had a major impact on CWB feed barley deliveries since 1995-96.

In summary, these two constraints could potentially cause revenue reductions to the western Canadian grain industry including:

- C losses to barley growers through lower CWB barley pool returns;
- C losses to barley growers because initial prices are not sufficiently high enough for cash flow needs, so they sell at a discount into the domestic market to improve cash flow;
- C losses to grain companies due to lower volumes handled;
- C losses to the CWB in an opportunity to be responsive to producers.

## Previous Studies

The marketing of western Canadian feed barley has been a controversial topic since the proposal of a continental barley market in 1992. Since then, there has been no less than seven marketing studies, numerous rebuttals and journal articles analyzing the strengths and weakness' of the current marketing system of barley marketing in western Canada. CWB feed barley pool returns and export volumes have been central in many of these studies. In April 1992, Alberta Agriculture released “A Proposal for a North American Continental Market for Barley”, calling for an open market for feed and malting barley in North America (Alberta Agriculture, 1992). The CWB would retain jurisdiction over exports of feed and malting barley to off-shore destinations.

In November 1992, the Minister of State for Grains and Oilseeds, Charles Mayer, commissioned an independent study for a North American Continental Barley Market. As a direct response to the idea of a Continental Barley Market and an impending independent study for the Minister of State for Grains and Oilseeds, Charles Mayer, the CWB released a study, prepared internally, in December 1992 which evaluated the “Performance of a Single Desk Marketing Organization in the North American Barley Market” (Canadian Wheat Board, 1992).

The study argued that the CWB maximizes producer revenues by optimizing or ranking US and off-shore barley prices and selling into the highest market. As a result,

the study argues that the CWB should not, at times, sell into the US market even though US prices are higher than Canadian domestic prices to avoid potentially destabilizing the market.

Barley exports to the US are carefully managed to ensure that US domestic prices are not pressured down by Canadian feed barley exports into the US, according to the study. Anecdotal information is used to build a case for a relatively inelastic US feed barley market. The study argues that under an open barley market in North America, increased exports of feed barley into the relatively small US barley market would reduce US domestic feed barley prices. Further, they argue that since world commercial barley is priced off US domestic prices, lower US domestic prices mean lower world barley prices. In addition, the study concluded that a continental barley market would have an adverse impact on Canadian malting barley premiums.

The Study commissioned by the Minister of State for Grains and Oilseeds, Charles Mayer, "An Economic Analysis of a Single North American Barley Market" by Colin A. Carter was released in March 1993 (Carter, 1993). This study argues that the CWB has historically constrained feed barley exports because average off-board prices were lower than CWB prices in 10 of 17 years between 1975-76 and 1991-92.

US feed barley imports are empirically estimated to be elastic in this study. Therefore, higher Canadian feed barley exports into the US domestic market would have little impact on barley prices. The study concludes that although malting barley premiums would decline, producers would make up the difference with a savings in marketing directly to malt houses. The study estimates a net annual benefit of about \$121 million from higher exports of malting and feed barley into the US, coupled with a switch to higher-yielding feed barley varieties.

In April 1993, Prairie Pools released a study "A Continental Barley Market: Where are the Gains?" (Schmitz, Gray and Alvin Ulrich, 1993). This study argues that under a continental or open barley market, a loss of malting barley premiums would result in the greatest loss to Canadian barley growers.

In the feed barley market, the study argues that because feed barley trades at a premium to corn periodically in the US, the demand for barley is inelastic. As a result, under a continental or open market, significantly higher Canadian barley exports to the US would lower Canadian feed barley prices. In total, losses to Canadian malting and feed barley growers would be about \$15 million annually.

The next barley study was commissioned by Alberta Agriculture, Food & Rural Development, "The Economics of Single Desk Selling of Western Canadian Grain" (Carter and Loynes, 1996). This study examines the costs and benefits of the CWB as a single desk seller for wheat and barley in western Canada. The benefits of single-desk selling is analyzed by comparing on-farm prices in the US and western Canada. They reason that if single desk-selling benefits producers then it should translate into higher on-farm prices.

Because US prices were found to be higher than comparable western Canadian prices, the study argues there is a net cost for single desk selling, not a benefit. In addition, they suggest that the CWB introduces a number of regulations and institutional arrangements throughout the marketing system which cost producers and taxpayers an estimated \$37.50/tonne for barley. The study concludes that the "Removal of the CWB's single-desk status would raise farm income and reduce the burden on the

Canadian taxpayer.”

In June 1993, the Minister of State for Grains and Oilseeds, Charles Mayer, created a Continental Barley Market (CBM) for barley effective August 1, 1993, the beginning of the 1993-94 crop year. The CBM meant that all exports of feed and malting barley to the US were open to both the private trade and the CWB, with the CWB retaining responsibility for off-shore exports. This CBM was short-lived as a federal court reversed the decision on September 10, 1993.

In 1995, the Minister of Agriculture and Agri-Food, Ralph Goodale, created the Western Grain Marketing Panel (WGMP) for the purpose of comprehensively examining western grain marketing issues (Molloy et. al.). With respect to barley, the Panel commissioned KenAgra Management Services Ltd to undertake a qualitative assessment of the malting and feed barley markets in western Canada. “Barley Marketing: Issues and Alternatives,” (Ken Agra Management Services, 1996) outlined many operational issues and inefficiencies in the barley marketing system. The panel recognized a number of problems specific to the marketing of barley.

- C *“Canadian feed barley is not judged to be a superior barley in the export markets and there is no evidence that it has been able to command a quality premium.*
- C *Inadequate price signals from the CWB on export prices and the lack of any spot or forward price signals.*
- C *A consequent periodic lack of arbitrage particularly between the off-shore export prices and domestic prices and also between US prices and western Canadian domestic prices.*
- C *A view on the part of significant number of western farmers that they have not always been able to access the highest price markets and therefore have lost income”.*

## **Analysis of Historical Feed Barley Prices**

The total proportion of feed barley which is priced via the off-board feed barley market has increased from about 60 percent in 1992-93 to about 80 percent in 1999-00. At the same time, CWB feed barley pool volumes have declined to less than 5 percent of total disposition. Nonetheless, the CWB feed barley pool remains an important component of feed barley prices because, in most years, western Canada is a region of excess production. Producers attempt to arbitrage between the CWB and the off-board market because the CWB feed barley pool is voluntary. Subject to contract delivery calls for CWB deliveries, producers sell to the CWB or off-board market based on cash flow requirements and expected returns from each market. Off-board premiums and discounts relative to the CWB PRO generally reflect local supply and demand conditions within western Canada. For example, in Calgary, Alberta, which is normally in a feed deficit situation during portions of the crop year, off-board feed barley prices generally trade above the CWB PRO, basis on-farm.

In surplus growing regions, off-board barley prices can trade at discounts to the PRO in years with large barley carry-outs, which can reflect insufficient export demand for feed barley. However, this has generally not occurred over the last five years, primary because of strong domestic demand.

The off-board barley market trades at a premium to the CWB PRO when domestic barley carry-out stocks are low due to supply and demand conditions and/or when the initial payment is set relatively low compared to the PRO. When the initial payment is set relatively low, producers' cash flow is reduced and deliveries to the CWB pool account are reduced. The off-board market reacts to changes in US and off-shore spot feed barley values only to the extent that those changes are reflected in the CWB PRO. When the off-board price is higher than the PRO, the CWB can not increase the PRO until off-shore returns warrant the increase. In order to fully arbitrage these markets, the CWB would have to sell into the higher domestic market. When off-board prices are higher, however, the CWB does not always arbitrage the domestic market, likely because a diversion of sales away from international markets to the domestic market could help lower domestic off-board prices for about 80 percent of total barley disposition. As a result, the CWB barley PRO basically provides a backstop for feed barley prices in western Canada because the arbitrage between the two markets generally occurs in only one direction.

**In 1994-95**, volumes delivered to the CWB barley pool account dropped by more than 50 percent to about 1 Mt because of tight domestic supplies. With higher off-board prices and tight supplies, the CWB had trouble sourcing enough barley to meet sales commitments. "...there were many instances where Japanese ocean vessels had to wait extended periods of time at the West Coast ports to receive their cargoes, resulting in increased demurrage costs to the pool." (CWB 1994-95 annual report). This increased the costs associated with the feed barley pool and reduced pool returns below expectations.

**In 1995-96**, tight world barley and reduced export subsidy levels allowed the CWB PRO to increase significantly during the crop year. Although the CWB increased, it did not follow the rapid increase nor did it peak as high as international prices. At one point, the CWB PRO was about Cdn\$45/tonne less than comparable French and US barley FOB West Coast. This suggests that the inability for the PRO to reflect higher international spot prices likely caused pooling price arbitrage losses in 1995-96. In fact, the CWB "appealed to farmers to deliver feed barley early in the crop year so that premium values could be obtained." (CWB 1995-96 Annual Report)

In the meantime, off-board prices followed the PRO higher and generally stayed at similar prices throughout the crop year. The August initial payment was set at 77 percent of the July PRO and was quickly increased to follow higher international prices. Deliveries to the CWB feed barley pool increased to 1.3 Mt and the CWB "focused its export sales on the premium Japanese market" (CWB 1995-96 Annual Report) during the early part of the crop year. With the anticipation of lower prices in 1996-97, the CWB maintained pool returns by refusing deliveries which would reduce the feed barley PRO during the latter part of the crop year.

**In 1996-97**, in response to the higher prices in 1995-96, world and Canadian barley supplies increased significantly. Despite a large increase in domestic demand and exports, Canadian barley carry-out increased significantly. Domestic prices were



pressured by a record crop and off-shore feed barley prices were affected by high EU export subsidies. Off-board feed barley prices traded near the CWB PRO during the first quarter of the crop year and then increased above the PRO for much of the remainder of the crop year. The initial payment was set at 80 percent of the July PRO, a higher proportion than what was used over the previous three crop years. Deliveries into the CWB feed barley pool account almost doubled to 2.4 Mt or about 35 percent of total Canadian barley disposition. The large feed barley pool necessitated that significant volumes be sold into subsidized markets and as a result, PRO values tracked comparable French barley prices through most of the crop year.

**In 1997-98**, higher production combined with lower world trade resulted in significantly larger world barley carry-out stocks, higher EU barley subsidies and lower world barley prices, particularly in subsidized markets. With a somewhat unknown level of EU barley export subsidies, the CWB August initial payment was set at only 62 percent of the July PRO, the lowest proportion on record. While the CWB PRO tracked declining US commercial PNW barley prices, off-board feed barley prices continued strong until the summer of 1998 with higher beef cattle feed use as more cattle moved into feedlots due to a liquidation of the beef herd. During the last quarter of the crop year, the spread between the PRO and off-board prices was about \$37/tonne basis Saskatoon, Saskatchewan. The result, feed barley deliveries to the CWB declined from 2.4 Mt in 1996-97 to 0.3 Mt in 1997-98.

**In 1998-99**, off-board feed barley prices started the year much like in 1997-98, significantly higher than the CWB PRO, in-store Saskatoon, Saskatchewan. The CWB PRO basically tracked international commercial feed barley prices during the beginning of the crop year. With no real opportunities to sell barley above domestic prices on international markets, the "CWB chose to sell more feed barley than it traditionally has into the domestic market because of relatively strong domestic prices." (CWB annual report 1998-99) This effectively arbitrated the PRO and the off-board market. By December 1998, the spread between the PRO and the off-board market had disappeared. In fact, by selling into the domestic market, the CWB feed barley PRO increased above comparable US PNW commercial barley prices. Although the CWB PRO and off-board prices remained roughly equal for the remainder of the crop year, basis Saskatoon, Saskatchewan, deliveries to the CWB feed barley pool remained at only 0.3 Mt, similar to 1997-98. Although higher off-board domestic prices during the beginning of the crop year were primarily responsible for the low level of deliveries into the CWB feed barley pool account, the initial payment was set at only 71 percent of the July PRO. In addition, the spread between the initial payment and the PRO remained high during the last half of the crop year when initial payment adjustments normally close the spread.

**In 1999-00**, the CWB PRO roughly tracked the US PNW commercial barley prices through the crop year. While commercial barley prices traded relatively flat throughout most of the crop year, subsidized French barley prices increased as EU exportable barley supplies and subsidy levels declined. The CWB PRO traded roughly on par with off-board prices until the spring of 2000 when off-board prices increased relative to the PRO in-store Saskatoon, Saskatchewan. The August initial payment at the beginning of the crop year was set at 67 percent of the PRO. Furthermore the spread between the PRO and the initial remained over \$30/tonne until May 2000, much

like in the previous crop year. Although CWB feed barley deliveries are estimated to double to about 0.6 Mt, or about 4 percent of total disposition, but still significantly lower than in pre-1997-98 levels.

## **Summary of Historical Factors Limiting Barley Exports**

There have been numerous factors which have affected the interaction between off-board prices and CWB feed barley pool returns over the last five years which, in turn, have significantly reduced CWB feed barley exports.

First, there has been a significant increase in the demand for domestic feed barley. The repeal of the WGTA in 1995-96 has had a significant impact on livestock numbers and therefore the demand for feed barley. Barley feed use (feed, waste and dockage) has increased from 7.2 Mt in 1990-91 to an estimated 10.2 Mt in 1999-00. This is the single largest factor affecting exportable feed barley supplies in western Canada.

Second, EU export subsidies have at times reduced off-shore feed barley values to less than domestic off-board feed values. Since the CWB feed barley pool is voluntary, producers have a choice whether to deliver to the off-board market where prices have been strong, or to the CWB. Since 1995-96, there have been significant periods where off-board feed values have been higher than CWB prices, basis on-farm in major surplus growing regions of western Canada.

Third, there appears to be a relationship between CWB feed barley deliveries and the August initial payment as a proportion of the PRO at the beginning of the crop year. The higher the August initial payment as a proportion of the PRO, the higher the CWB feed barley deliveries as a proportion of total barley disposition. For example, since December 1998, off-board and CWB prices have been relatively equal, basis Saskatoon, Saskatchewan. Yet CWB deliveries to the feed barley pool have only been about 2-4 percent of total barley disposition, compared to average pool deliveries of about 17 percent of total disposition over the previous five years. During this same period, the August feed barley initial payment compared to the PRO at the beginning of the crop year has declined from about 75-80 percent prior to 1997-98 to 71-63 percent over the last four years. With the decline in initial payment levels has come an increase in the number of adjustments in the initial payment. Nonetheless, the lower initial payments have lowered the cash flow of western Canadian barley growers which, in turn, has reduced deliveries to the CWB feed barley pool account.

Fourth, pooled pricing arbitrage problems may have also helped reduce CWB pool volumes in 1995-96. Pooled pricing arbitrage creates losses to barley producers when international cash spot prices rise faster and higher than the PRO. This reduces the volume of feed barley delivered to the CWB then would be if producers were able to arbitrage the higher international spot price. This reduces exports and increases the volume sold in the off-board market and/or carry-out stocks, which in turn, reduces domestic off-board feed barley prices. This type of loss is a well documented fact in 1994-95. A comparison of the PRO and international feed barley prices suggests it very likely also occurred in 1995-96. The prerequisite for this problem is a rising international feed barley market. International barley prices increased sharply in 1995-96 and then generally have been trading downward or roughly flat. As a result, 1995-96

is the only year where pooled pricing arbitrage problems may have resulted in lower CWB feed barley exports over the last five years. Lower CWB feed barley deliveries in 1995-96 likely resulted in lower off-board barley prices.

## **Marketing Alternatives**

Overall, two major marketing problems and constraints are recognized to have reduced feed barley deliveries to the CWB since the 1994-95 crop year: 1) a widening spread between the CWB initial payment and the PRO, and 2) pooling price arbitrage losses. These constraints represent real losses to barley producers and the grain industry. The following sections identify and analyze four possible marketing alternatives which could help to alleviate the two constraints.

### **Higher CWB Initial Payment**

The initial payment could be increased relative to the PRO. Prior to 1997-98, feed barley initial payments were set at 75-80 percent of the PRO and increased as the crop year progressed. Although the initial payment is currently set at about 71 percent of the PRO, it could be increased to 80 percent of the mid-point of the current (July 2000) CWB PRO of \$134 a tonne I/S VC/SL. This could result in an initial payment of \$107/tonne I/S VC/SL, an increase of \$12/tonne.

#### **Pros**

- C Requires no additional resources to administer; and
- C Increases cash-flow to producers and therefore will increase deliveries into the feed barley pool account.

#### **Cons**

- C Increases the risk of a deficit in the feed barley pool account. There have only been two deficits in the feed barley pool account: \$110.90 million in 1986-87 and about \$0.96 million 1990-91. A deficit in the feed barley pool account would exacerbate current pressures on state trading enterprises from the US. The US has indicated that in the upcoming World Trade Organization talks, they will be pressing to end the exclusive rights of the CWB and set up special requirements on export pricing and eliminate all government funding or guarantees for single desk sellers; and
- C Does not address potential pooling price arbitrage losses under conditions where international barley prices are increasing.

### **Fixed Price Contract**

A fixed price contract (FPC) marketing alternative would operate much like the new FPC for CWRS wheat priced off Minneapolis wheat futures except that the CWB would hedge the transaction using WCE western feed barley futures contracts. Similar to

wheat, growers would sign up on the day or within a specified number of days of the announcement of the CWB feed barley PRO. With each announced PRO, the CWB announces a fixed price based on the mid-point of the PRO minus a discount for risk, time value and CWB administrative costs.

When a producer locks in the FPC for feed barley, the CWB is in a long cash position because they have purchased the feed barley at a fixed price. Then, the CWB would sell corresponding WCE feed barley futures contracts to manage the risk. When feed barley sales are made during the crop year, the CWB buys feed barley futures contracts to close out or cover the FPCs.

Similar to the FPC for wheat, the CWB is exposed to basis risk from the time the contract is opened (they sell barley futures on the WCE) to the time all feed barley pool sales have been made (buy barley futures on the WCE). The basis is defined as the difference between the domestic western feed barley futures price and actual CWB feed barley sales. For example, the CWB would be at risk for domestic barley futures values increasing relative to sales made at international barley prices. This implies higher feed barley prices in the off-board domestic market because the CWB barley PRO basis on-farm basically provides a backstop for off-board feed barley prices in western Canada.

Although the most effective risk management is an active feed barley sales program, the CWB has another very important strategy to limit its basis risk by using the domestic futures and/or cash market as an additional marketing alternative. Basis risk can be managed through a program of purchases and sales on a basis to futures. In particular, producers and/or trade barley purchases on a basis in conjunction with barley sales to customers on a basis. This would provide the CWB with another pricing alternative to offer its customers and further enhance WCE feed barley futures as a reference for world barley prices. The better WCE barley values track international barley values, the lower the basis risk for the CWB under the fixed and basis pricing contracts. This is a major advantage to using the domestic feed barley futures market to manage the risk as opposed to the Chicago corn futures market.

For example, when western Canadian barley futures prices increase relative to international prices after the FPC has been priced (the CWB sells feed barley futures), the CWB could deliver feed barley on futures contracts instead of closing out the contracts (buying back futures) or sell into the domestic cash market. This would force international and the off-board feed barley markets to converge and minimize the basis risk for the CWB under the FPC.

In addition, the CWB could also maintain the pricing window for the FPC for a specified period of time and close the alternative at any time. This would enable the CWB to protect themselves against receiving too much feed barley into the system at a given price and increasing their exposure to world barley price volatilities.

The other issue is the liquidity on the WCE feed barley futures contract. It is important that the futures market is liquid where buying and selling of futures contracts can be

done with relatively small futures price changes and narrow bid offer price spreads. Volume and open interest are normally good indicators of liquidity. Total year-to-date volumes in the western barley futures contract are 15.5 percent higher than the previous year. Average daily pit volume is currently around 1100 contracts or about 22,000 tonnes. However, when Exchange for Physicals are included, daily volume has been as high as 4,000 contracts or about 80,000 tonnes. As well, when more commercials enter the market, traders often see opportunities and enter the market, creating more traded contracts and therefore higher liquidity.

It is important to note that the success of a FPC program for feed barley largely depends on the level the CWB sets the fixed price. A fixed price level set too low would insure that few producers would use the contract.

### **Pros**

- C Additional pricing flexibility for producers;
- C Increases deliveries to the feed barley pool account;
- C Increases producers' cash flow by offering full payment, minus program costs, upon delivery of grain to CWB pool account;
- C Could be offered throughout the crop year;
- C Helps ensure arbitrage between off-board and CWB pool prices; and
- C Facilitates risk management for all industry participants.

### **Cons**

- C Producers still subject to CWB contract calls for cash flow;
- C CWB carries basis risk - the risk of an increase in the spread between the WCE futures price and international prices from the time the producer locks in the cash price to the time all feed barley pool account sales have been made; and
- C Does not address potential pooling price arbitrage losses under conditions where international barley prices are increasing.

### **Basis Price Contract**

A basis price contract (BPC) for feed barley could be implemented much like the current BPC for CWRS wheat, except it would be based on the WCE western feed barley futures contract. The BPC would be set by determining a set basis between the mid-point of the feed barley PRO and western barley futures minus a discount for risk, time value and CWB administrative costs. The futures price, which must be locked in before settlement or before the basis price expiry date, can be locked in later. Like in the BPC for spring wheat, producers would only be able to sign up for the BPC before the beginning of the crop year.

Like in the FPC, the CWB is at risk to WCE barley future prices increasing relative to prices it receives on international feed barley markets. The CWB would be able to manage their price risk by using domestic feed barley futures and/or cash markets. Like in the FPC, the success of a BPC program for feed barley depends on the level the CWB sets the basis. A basis level set too low would mean that few producers would use the new pricing alternative.

**Pros**

- Ⓒ Same as FPC.

**Cons**

- Ⓒ Could not be offered during the crop year;
- Ⓒ CWB carries basis risk - same as FPC;
- Ⓒ Does not address potential pooling price arbitrage losses under conditions where international barley prices are increasing; and
- Ⓒ Producers still subject to CWB contract calls for cash flow.

**CWB Cash Barley Buying**

On November 7, 1997 Bill C-4, amendments to the CWB Act was passed allowing for purchase of grain at a price other than the initial payment. Much of the impetus behind this amendment stemmed from the CWB's inability to source sufficient feed barley to meet sales commitments in 1994-95. To date, the CWB has not used this alternative.

A daily cash price would provide barley producers a regular indication of off-shore returns, which they would compare to domestic returns. This would provide the arbitrage mechanism necessary to ensure that domestic prices reflect international markets in rising markets. This is because the CWB pooled returns do not increase as fast or as high as international spot prices because they reflect average prices received during the entire crop year. Similar to the operation of a BPC during the crop year, the continuous operation of a cash barley buying program would not likely be successful over the long-term alongside the current feed barley pool.

If producers were able to choose between the pool account and cash spot prices, producers would be able to cherry pick the CWB pool account or the cash spot prices. In a rising cash market, when the pooled price lags behind cash prices, farmers would opt for the higher cash prices while in years of declining prices, producers would opt for the pool account.

As a result, if cash barley trading was employed alongside the pool, the pool account would have to be contractual, where producers choosing the pool would have committed volume before the start of the crop year. This would likely increase compliance costs in years when cash pricing were increasing.

If cash buying replaced the feed barley pool account with the CWB retaining control of exports, there could be a major weakness with respect to equity between the prices producers received. For example, the CWB routinely sells feed barley into both commercial or non-subsidized and subsidized markets. Under the cash buying alternative, how would they allocate cash purchases between commercial and subsidized markets without some serious price differences paid to producers. It is interesting to note that all major feed barley exporters use some type of a state trading device: the US & the EU (export subsidies), Australia & Canada (single-desk selling).

As a result, the most feasible approach is likely for the CWB to implement cash buying only as a contingency measure. The CWB would not issue daily cash buying prices, but reserve this alternative to situations where they were unable to procure sufficient feed barley to sell into higher priced international markets.

### **Pros**

- C Insures that CWB pooled feed barley prices arbitrage international prices and therefore pooling price arbitrage losses are minimized;
- C If implemented as a contingency measure, the benefits of CWB pooled pricing would not be lost for feed barley;
- C Increased feed barley exports;
- C Does not involve the CWB carrying basis risk; and
- C If used in conjunction with the fixed and basis pricing options, cash buying would probably reduce the risk of these two pricing alternatives. This is because cash buying of feed barley would help arbitrage international cash barley prices with domestic off-board prices. This, in turn, could help insure that WCE western feed barley futures prices track international feed barley prices. This should stabilize the basis between the domestic futures price and international feed barley prices under certain supply and demand conditions which should lower the risk for the fixed and basis pricing options.

### **Cons**

- C Possible equity issues between producers who deliver to CWB cash market and the CWB pool account.

## **Summary**

This study examines initial barley price policy and other policies by the Canadian Wheat Board, regarding CWB barley exports. It identifies two major problems with feed barley marketings which can result in losses to producers and the grain industry.

First, the CWB August initial payment as a proportion of the PRO has declined from 75-80 percent in 1993-1996 to 63-71 percent in 1997-1999, due to government reluctance to guarantee possible price short falls. This has resulted in lower CWB exports, higher non-CWB domestic supplies, and sometimes lower domestic price relative to world price. Although there have been numerous adjustments to the initial payments during these crop years, initial payments as portion of the PRO during the first half of the 1997-1999 crop years have remained lower than in previous years. The higher the initial payment as a proportion of the PRO, the higher the immediate cash flow to barley growers and therefore an incentive to increase deliveries to the CWB pool account. Lower pool account volumes generally mean lower exports, more off-board domestic barley sales and/or higher carry-out stocks, which in turn, means lower off-board prices.

Second, there is no effective arbitrage between international cash barley prices and the CWB feed barley pool account. If international cash feed barley prices rise during the crop year, the PRO will not rise as quickly and as high as international cash

barley prices because the CWB PRO is an average of all sales prices during the crop year. This reduces the volume of feed barley delivered to the CWB and increased volumes sold in the off-board market and/or increases carry-out stocks, which in turn, reduces off-board barley prices.

Therefore, to solve this problem the CWB could:

- C implement a fixed and basis pricing alternative for feed barley and consider using WCE domestic feed barley futures to hedge their risk under both alternatives. This would help ensure that deliveries to the CWB pool account are not reduced by a lack of arbitrage between the pool and off-board barley market. Higher deliveries to the CWB pool would reduce off-board marketings and/or carry-out stocks, which in turn increases domestic feed barley prices. The fixed pricing contract should be implemented as soon as possible and made available throughout the 2000-01 crop year. This would ensure sufficient feed barley deliveries to the CWB pool account to take advantage of feed barley exports opportunities in early 2000-01. The basis pricing contract could be initiated in the spring of 2001 for the 2001-02 crop year; and
- C implement feed barley cash buying as a contingency marketing alternative. Cash buying would occur alongside the feed barley pool, but it would mainly be used in rising international feed barley markets and when the CWB was unable to source sufficient supplies to service higher value off-shore markets. Cash buying would increase exports and reduce domestic supplies which, in turn, should increase domestic barley prices.

These two marketing alternatives could potentially result in significant gains to the western Canadian grain industry including:

- C gains to barley growers through higher export volumes and prices;
- C improved cash flow for producers delivering to the CWB feed barley pool;
- C gains to grain companies due to higher volumes handled;
- C an opportunity for the CWB to be responsive to producers;
- C enhance the liquidity of the WCE western feed barley contract; and
- C facilitate risk management for all industry participants.



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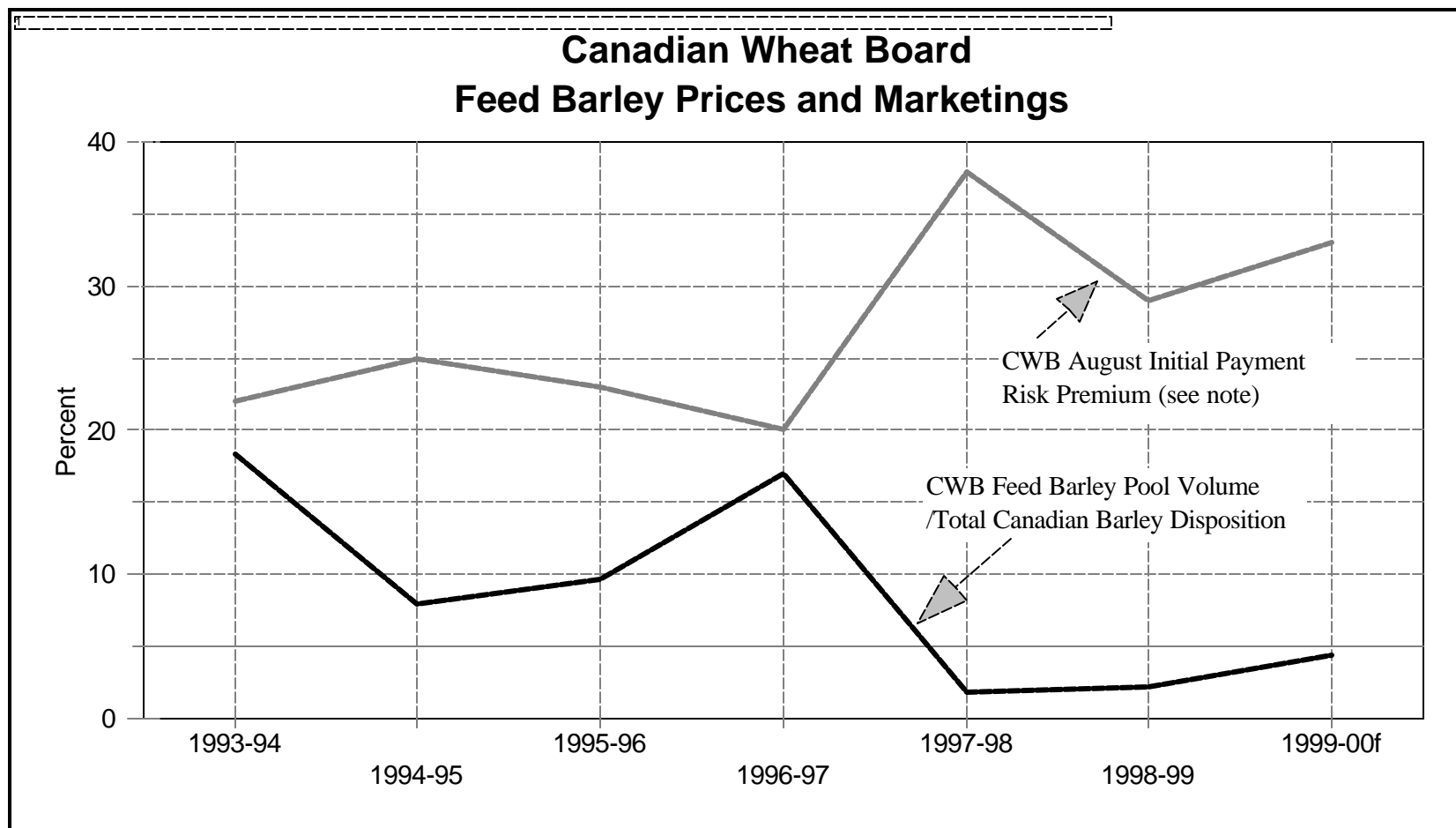
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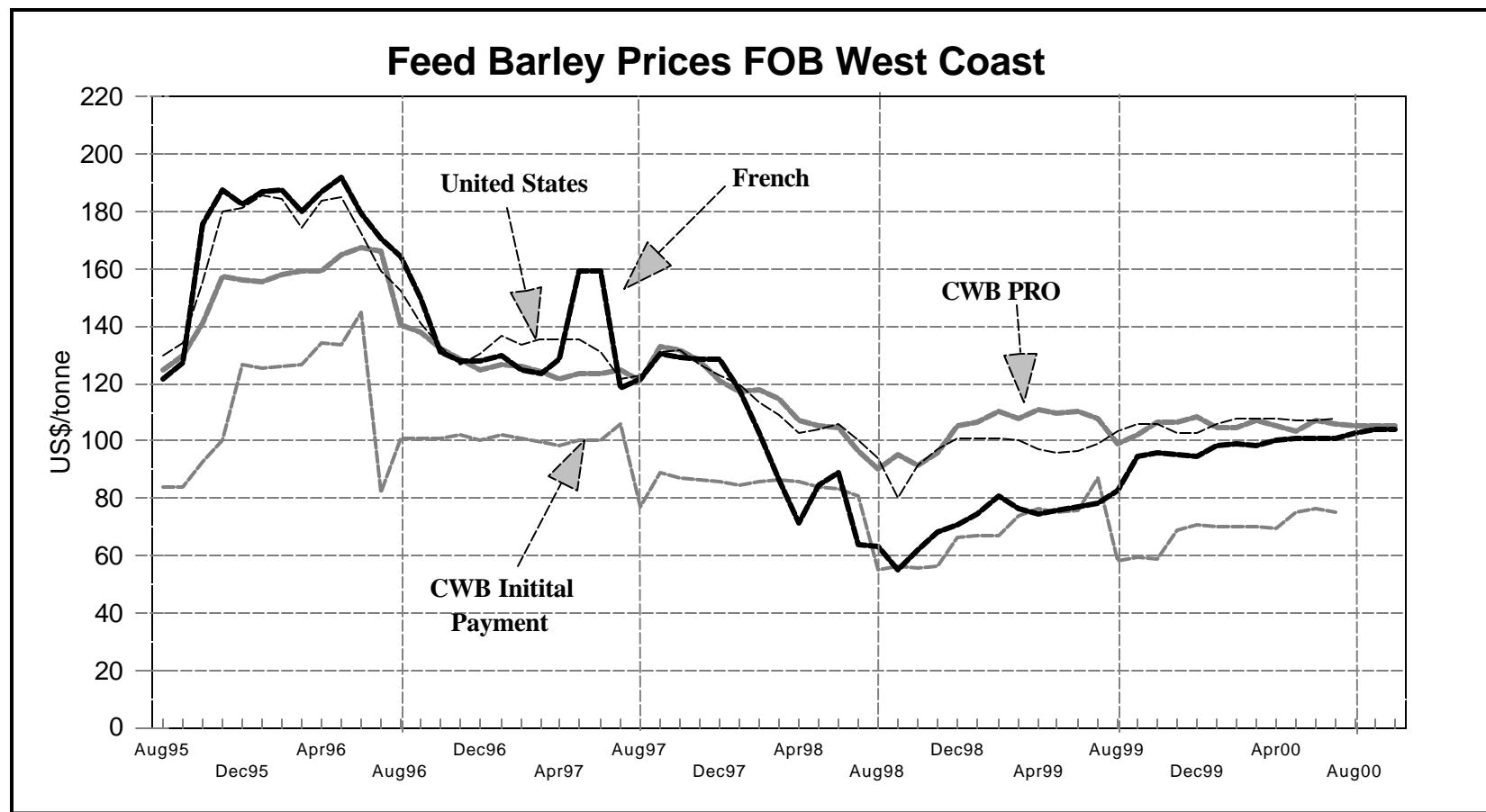
<b>Western Canada: Barley Marketings</b>								
	Total Canadian	CWB Feed	CWB Design'e d	Total CWB	Non-CWB Barley	Total Licensed	Ttl Licensed Mktings/	CWB Feed Bly Pool/
Crop Year	Barley Disposition	Barley Pool	Barley Pool	Barley Pools	Licensed Mktings	Barley Mktings	Total Disposition	Total Disposition
	----- 000s tonnes -----						%	%
1992-93	10,383	3,328	919	4,247	642	4,889	47	32
1993-94	12,870	2,363	1,728	4,090	1,873	5,964	46	18
1994-95	13,255	1,060	2,260	3,320	2,477	5,797	44	8
1995-96	13,123	1,268	2,550	3,817	2,277	6,094	46	10
1996-97	14,402	2,440	2,402	4,842	2,144	6,986	49	17
1997-98	14,022	262	2,267	2,529	2,597	5,127	37	2
1998-99	12,486	277	1,922	2,199	1,907	4,106	33	2



CWB August Initial Payment Risk Premium = The difference between the CWB July Pool Return Outlook for No. 1 CW barley and the corresponding August initial payment expressed as a percent of the July Pool Return Outlook.

Source: CWB, Statistics Canada and Agriculture & Agri-Food Canada

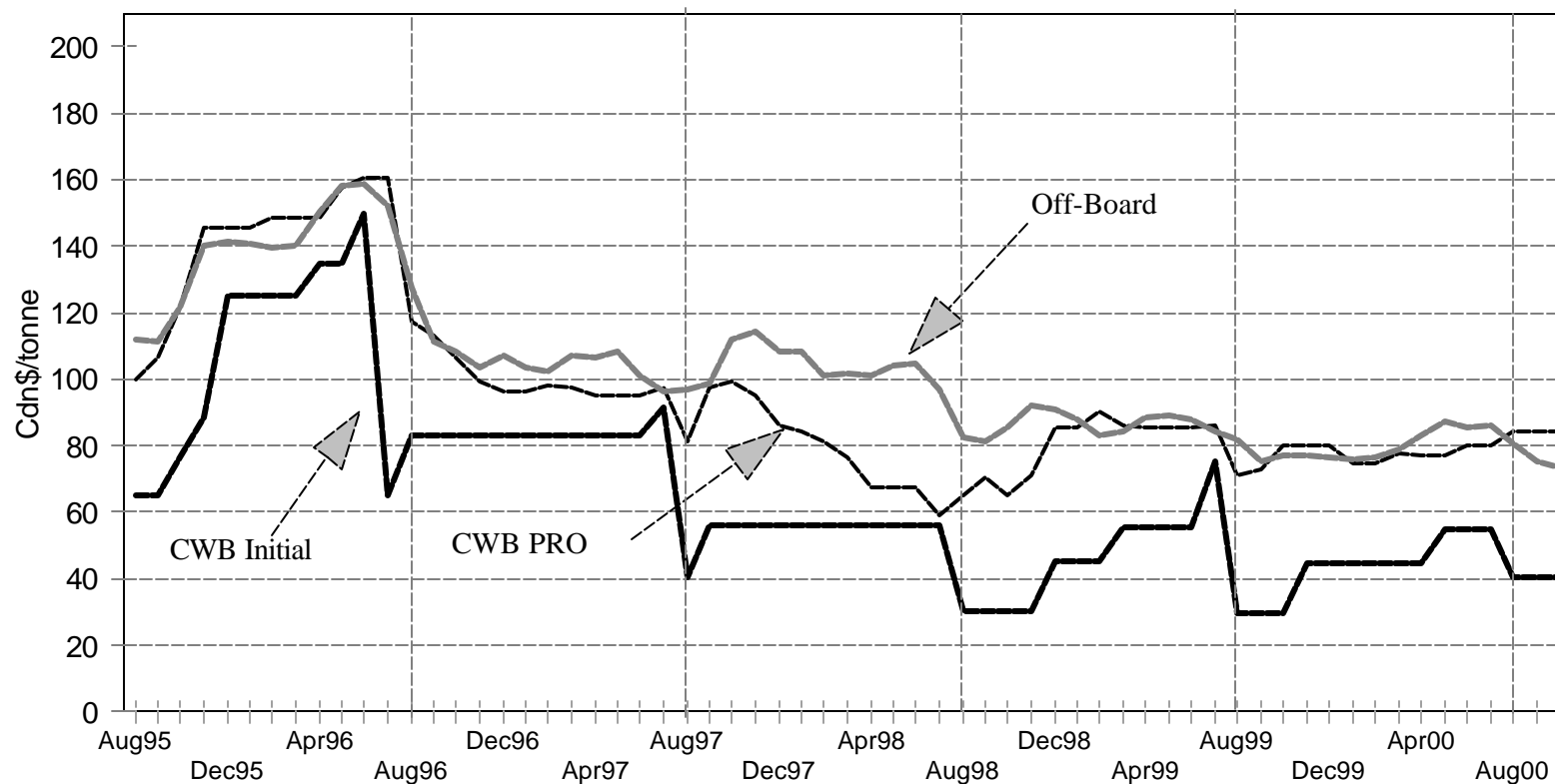
f = forecast pool size



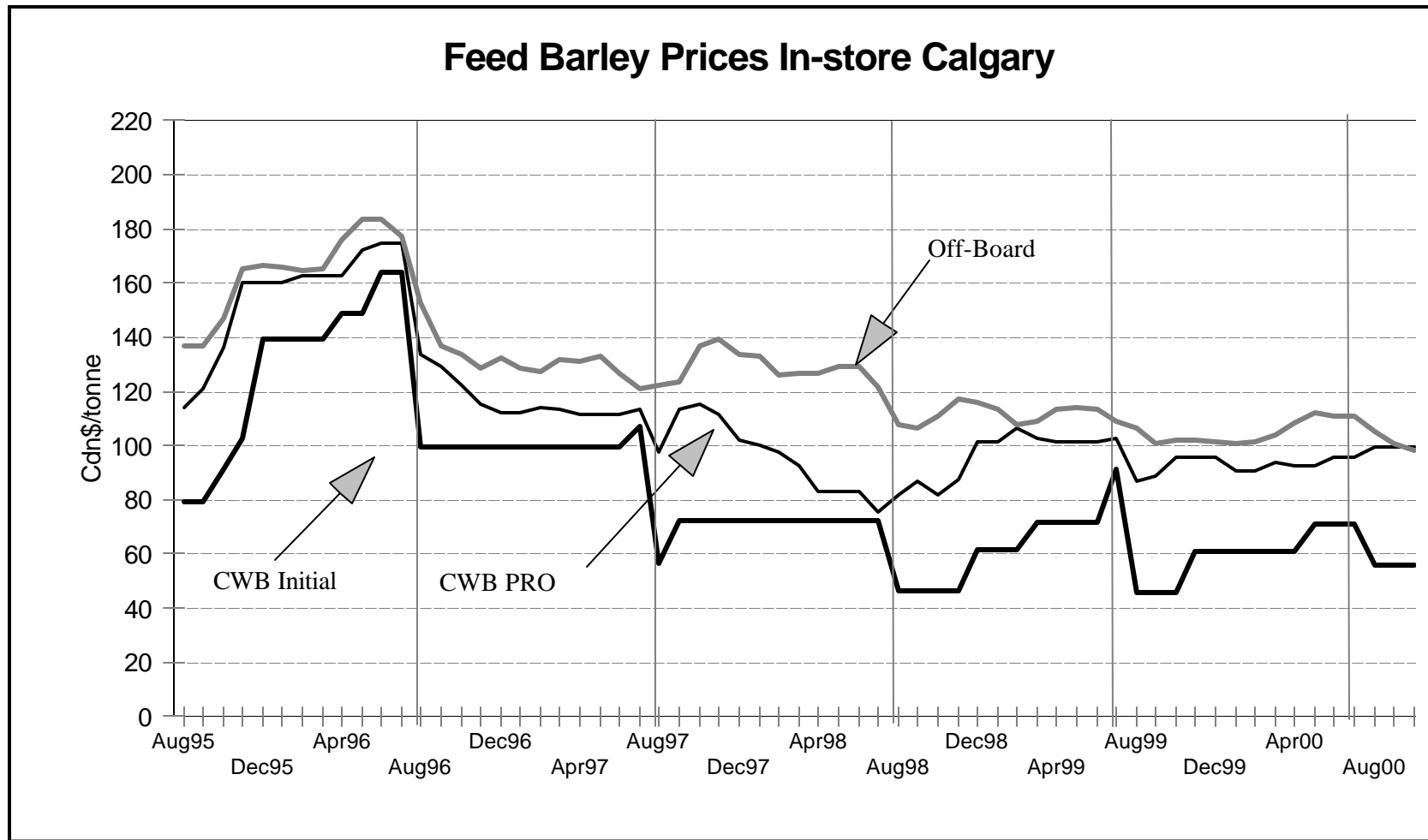
Notes: French - Barley FOB France minus US\$6/tonne freight advantage to Saudi Arabia  
 United States - No 2 Barley Exporters offers FOB Pacific North West for 30 day shipment  
 CWB PRO - CWB PRO/EPRS I/S VC/SL for No 1 CW barley minus Cdn\$10/tonne fobbing plus total pool costs excluding net interest earned  
 CWB Initial Payment - CWB Initial Payment I/S VC/SL for No 1 CW barley plus Cdn\$10/tonne fobbing plus total pool costs excluding net interest earned

Source: Louis Dreyfus Corporation, USDA, CWB

## Feed Barley Prices In-store Saskatoon



Notes: Off-Board - Winnipeg Commodity Exchange No 1 CW barley cash prices, Lethbridge, AB minus Cdn\$30/t freight & margin  
 CWB PRO - CWB PRO/EPRS I/S VC/SL for No 1 CW barley minus Saskatoon freight, elevation, & cleaning  
 CWB Initial - CWB Initial Payment I/S VC/SL for No 1 CW barley minus Saskatoon freight, elevation, & cleaning  
 Winnipeg Commodity Exchange, CWB, CGC



Notes: Off-Board - Winnipeg Commodity Exchange No 1 CW barley cash prices, Lethbridge, AB minus Cdn\$5/t freight & margin  
 CWB PRO - CWB PRO/EPRS I/S VC/SL for No 1 CW barley minus Calgary freight, elevation, & cleaning  
 CWB Initial - CWB Initial Payment I/S VC/SL for No 1 CW barley minus Calgary freight, elevation, & cleaning  
 Winnipeg Commodity Exchange, CWB, CGC