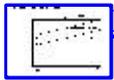




Cash Markets

In the previous sections it was explained how futures prices are determined, how spreads are established, and how the cash price relates to the futures price. Just to review for a moment - the futures price is established in a public forum based on a supply and demand; spreads between futures months reflect the cost of carrying (storage and interest) canola from one futures month to the next; and the cash price differs from the nearby futures in the amount of the cost of holding the canola in position until the futures month. It may reflect short term supply or demand conditions which produce a price either above or below the actual carrying cost. A fundamental principle is that the cash and futures prices converge (come together) at the market location as the futures approaches maturity. There is another cash price, the street price, which differs from the futures price in the amount in costs to move and handle the canola from the country position to the port position. Consequently, the street and futures prices never converge.

The difference between the futures and cash price or street price is called the basis. In a normal market the basis bears a predictable relationship to the futures.



Relationship of Cash to Futures

In the case of the cash market the basis should reflect carrying charges at any point in time and will gradually diminish until it becomes zero during the contract delivery month. If conditions exist which will affect the futures markets differently than they affect the current cash markets, the basis may diverge from the traditional storage and interest handling charge pattern. Under such circumstances, and in situations where information is sound and the product can be moved, arbitrage will occur. Arbitrage is profit motivated behavior which buys in a discounted market and sells in an overpriced one. When there are no restrictions in the market, arbitrage serves to bring cash and futures prices back "into line". Whenever the difference between the cash and futures prices (basis) exceeds the cost of bringing the cash commodity forward to the futures position, arbitrage should set in to restore equilibrium.

For example, assume the full cost of carrying canola to the November futures delivery month is \$30 per tonne but the existing basis is \$40. With the prospect of a \$10 per tonne profit, traders would sell a futures contract and buy the cash commodity in preparation for delivering on the futures contract. This in effect results in a relative increase in supply of the futures contract, and a relative increase in demand for cash canola; this will cause the futures price to fall and the cash price to rise. In Canada, arbitrage between cash and futures is restricted because canola can only be shipped by rail car to Vancouver if it has a confirmed export sale. This makes it difficult for producers to move their canola into a position where it can be delivered against the futures market. Any disruption in the arbitrage between the cash market and the futures can cause discrepancies between the two.

The street price and futures price, while they bear a relationship to each other, will never converge because they represent the price of canola at two different locations, in the country and at port.

The basis between the street and futures price includes what could be termed fixed and variable costs. Fixed costs include elevation, freight, inspection and cleaning. These costs rarely change during the crop

year, because in most cases maximum tariffs are set by regulatory agencies. In the case of elevation, inspection and cleaning, the Canadian Grain Commission sets maximum charges.

Basis calculation for canola (delivered to Saskatoon)

Elevation	\$13.65
Freight	7.07
Cleaning & shrink	4.30
Inspection	.24
Total fixed	\$25.26
Interest	9.09
Storage	4.65
Premiums (discounts)	.00
Risk & opportunity	.00
Total variable.....	\$13.65
Total basis	\$38.91

Included in the variable portion of the basis are the costs of interest, storage and risk. If a grain company is quoting a basis on canola to be delivered several months into the future, it has a risk that its costs will be considerably different at the time of delivery. It is understandable that the company will add a cost to its basis that reflects this risk. In addition, the company may already have several months' supply of canola in store. If it takes in another month's supply of canola it may not only have a real cost of carrying the canola, but it may also be restricting its ability to handle other grains. As the company makes more money from shipping stocks than storing them, it will tend to penalize the slower moving grain by adding additional months of carrying charges.

It may seem difficult to understand why prices vary between companies, but it is simply a question of supply and demand. One company may be shipping its canola faster than another, because it has lined up more sales. Another company may be buying canola to crush for oil and meal rather than for seed for export. In the above example, three months' storage and interest were allowed in the basis. If one company has two months' smaller supply of canola in store, it could afford to pay you \$9.10 more per tonne for the product. This amount reflects two-thirds of the total variable costs (\$13.65) shown in the basis calculation for canola example which assumes three months' storage and interest. The net result is a monthly carrying cost of \$4.55 per tonne.

Any conditions which affect the quantity of canola available for sale will affect the basis. The local supply and demand situation is probably the most important factor affecting the basis. If there are surplus stocks, companies can bid less (widen the basis) and still acquire their supplies. On the other hand, if supplies are low some companies will find themselves low on stocks and will raise their bid (narrow the basis) to acquire additional stocks.

Unpriced Marketing Strategies

You may want to leave your canola unpriced because your analysis of market conditions indicates prices

are likely to be higher in the future than they are at present. Another reason for using an unpriced strategy is that you may wish to hedge or contract only a portion of your canola in case of lower than anticipated production or small quotas resulting in restricted delivery opportunities.

You could decide to store your canola on-farm for sale at a later date. Theoretically, the seasonality of canola production should result in the lowest prices shortly after harvest when supplies are highest. The price increases from harvest time to the period just before next year's harvest should reflect the storage costs and the interest costs involved in holding inventories.

When considering an unpriced canola marketing strategy, you should include in your analysis carrying costs such as interest and storage. When interest rates increase, the cost of holding canola becomes a more important factor.

In the following table the cost of holding canola at various interest rates and prices has been calculated for you. If you could receive a street price of \$250 for your canola at harvest in October, but you decided to hold it until February, you would require a price of at least \$260 in February to be as well off as selling in October, when interest rates are 12 percent.

Interest rate	Monthly cost of holding canola (\$/tonne/month)			
	\$200	\$250	\$300	\$400
10% (.83%/month)	\$1.66	\$2.08	\$2.49	\$3.32
12% (1%/month)	2.00	2.50	3.00	4.00
14% (1.17%/month)	2.34	2.93	3.51	4.68
18% (1.5%/month)	3.00	3.75	4.50	6.00

The above costs do not include any charges you would attribute to the cost of your storage facilities.

When deciding whether to store your canola on-farm or sell immediately, you should remember that you are adding an additional risk, that is, the potential for your canola to deteriorate during storage.

An alternative to a single cash price is price averaging. You can adopt this approach without resorting to the futures market or contracting. You can seek to secure the average market price over the course of a crop year by making sales at regular intervals, weekly, monthly or quarterly, over the year or any period during the year.

When you use a price averaging you are not compelled to stay with your sales spreading pattern. If you think prices are sufficiently high, or they are likely to go down, you can sell out the balance of your crop at any time, subject to the limitations of quotas.

A note on price quotations:

When you are considering delivery options and are comparing prices offered by the various alternatives, make sure you are comparing apples to apples. Remember the relationship between futures, cash and street prices. (Just to recap: futures price is an indicator of the approximate value of canola in export

position at some time in the future; cash price is a price for canola in export position now; street price is a price for canola quoted at a specific location in the country.) Don't be misled by trying to directly equate the cash price with your local country price.

This is particularly important when comparing prices quoted by canola crushers and grain handling companies. Usually a grain company will broadcast daily prices for one location, indicating that local freight must be deducted. Canola crushers generally quote FOB the plant. Often they offer a freight allowance to assist farmers with the costs of trucking. In order to make an equitable comparison, work the prices back to your farmgate price. That is, take into consideration freight deduction, freight allowance and any other factors that may affect your net return per acre.

The canola crusher and grain company are generally concerned about two different markets, one domestic and the other international. While the value of canola is ultimately based on the value of oil and meal internationally, market circumstances for the crusher and grain company will differ over the year, depending on the particular requirements of each market at a given time. It is reasonable then, to expect prices quoted by grain companies and crushers to vary.

