# THE DELAYED PRICING CONTRACT

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### THE DELAYED PRICING CONTRACT

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# Hugh McDonald, Dennis Ming, and William Wilson

The delayed pricing (DP) contract<sup>1</sup> is a relatively new innovation in North Dakota grain marketing. It is growing in popularity and use because of the advantages it offers the country elevator and the producer. However, there are also some disadvantages.

Factors that have probably encouraged increased use of the DP contract are the added flexibility it gives the elevator in assembling grain for multicar grain shipments, better utilization of leased hopper cars by country elevators, introduction of lower freight rates for multicar grain shipments, additional sources of working capital, and the farmer can delay the pricing decision if he is optimistic on the price outlook.

Under the DP contract, when the farmer delivers grain to the elevator, ownership is transferred but the pricing decision is deferred to a later date. Duration of the contract varies, but is normally negotiated for one year or less. The seller (farmer) may price the grain at any time within this time frame based on the current cash price.

#### HOW THE DP CONTRACT WORKS

Elevators that use DP contracts obtain title to the grain upon delivery by the farmer and may either store or sell it on the spot or to-arrive market. If the elevator markets the grain, it assumes risks associated with price movements brought about by changes in the basis or changes in the futures or both. If the elevator stores the grain, it assumes maintenance of quality risks and forgoes profitable price movements. The best alternative

<sup>&</sup>lt;sup>1</sup>The delayed pricing contract may also be referred to as a No Price Established (NPE) contract or a Deferred Pricing Contract.

for the elevator depends on market conditions and subsequent price movements. For example, if the basis, which is the spread between cash and futures, is expected to weaken or decrease (cash price declines relative to the futures), it would be preferable for the country elevator manager to sell the DP grain and purchase an equal amount of futures. However, it may be preferable to store the grain if the basis is expected to strengthen or increase (cash price increases relative to the futures).

Producers are often assessed a service charge by elevators for grain contracted under a delayed pricing contract. The service charge will vary. It is often equal to the price of commercial storage, but on occasion there may be no service charge at all.

The elevator manager's decision to sell or store DP grain should be based on three variables: (1) interest rates, (2) expected basis movements, and (3) service charges. In determining which alternative (store or sell) to implement, the elevator must consider all three variables. For example, storing the grain will generate revenues equal to the service charge paid by the producer. Selling the grain will generate revenues equal to the service charge, the interest return on the value of the grain sold and the change in basis.

Both the service charge and interest rate are fairly stable variables. That is, they can be locked in at levels that are not likely to change significantly. For example, if the interest rate used in the calculations changes from 18 percent to 15 percent, the effective difference is about one cent per bushel per month, assuming \$4.00 per bushel for grain. Changes in basis, however, affect the calculations to a greater degree, so basis changes should be given the most weight when determining whether to store or sell DP grain or how much the service charge must be changed when the base is strengthened. For example, if the potential interest income from the sale of the grain is less than expected strengthening of the basis, storage would be the preferred alternative, or the service

charge would have to be increased if the grain was to be sold at no loss. The sell option would be preferable, however, if the potential interest income from the grain sale was greater than the expected strengthening of the basis, or if the basis was expected to weaken.

The following example illustrates how the DP contract worked in the fall of 1981:

## August 10, 1981

A farmer delivered 5,000 bushels of 14 percent Hard Red Spring to the local elevator and signed a DP contract with a 3¢/month service charge.

The elevator sold the wheat, to arrive, Duluth, @ \$4.32 and simultaneously bought a December futures contract @ \$4.36. In other words, the elevator was hedged at a basis of  $4\phi$  under. The elevator then began earning 18 percent interest on the cash sale of \$4.32 until the farmer decided to price the wheat.

### November 10, 1981

The farmer came to the local elevator and priced the DP grain. The farmer received the current cash price which was based on the current to arrive price of \$4.38. The elevator sold back the December futures contract @ \$4.22, so the hedge was removed at a basis of  $16\phi$  over. The basis loss from August 10 to November 10 was  $20\phi$  per bushel (4 under to 16 over =  $20\phi$  loss).

The transactions are illustrated with the simple "T" account shown below.

CASH		FUTURES	BASIS
August 10	Farmer-delivers grain Elevator-sells delivered Duluth @ \$4.32	Buys Dec. @ \$4.36	-04¢
November 10	Farmer-prices Elevator-Duluth bid @ 4.38	Sells Dec. @ \$4.22	+16¢
		BASIS LOSS	-20¢
HOWE	EVER:		
	Interest earned on $$4.32 \times .18 \times 3$ months		+19¢
	Service charge @ 3¢/month × 3 months	=	+09¢
	TOTAL		+28¢
	Less basis loss	=	-20¢
	Net gain to the elevator	=	+08¢

This example does not include any savings that might occur from lower multicar rates or rebates on covered hopper cars, which would add to the net gain to the elevator. The 8¢ net gain is less than would have been earned by simply storing and earning the service charge of 3¢ per month on the 5,000 bushels. It is assumed, however, that the elevator would have used the 5,000 bushels of space more than once during the 90-day period, thereby increasing returns from handling more bushels.

For the producer, the decision to sell cash grain or sign a DP cash contract should be based on whether price will increase enough to pay the cost of holding the grain (the service charge and the opportunity cost). If the expected price rise is not enough to cover the added costs, the grain should be sold for cash unless there are income tax considerations that justify holding.

#### ADVANTAGES FOR THE ELEVATOR

- 1. Gives the elevator the option of increasing its volume handled if it chooses to sell the DP grain.
- 2. Makes it easier to take advantage of multicar rail rates. The elevator doesn't have to wait for the farmer to decide to sell in order to accumulate enough grain to fill a unit train because title passes to the elevator upon delivery.
- 3. Make more efficient use of leased or owned hopper cars. The cost of operating leased or owned hopper cars is a function of mileage traveled. Keeping the hopper car fully utilized can make several cents bushel difference.
- 4. Interest income is earned on sales of DP grain even though the farmer has not priced the grain. This is a source of working capital for the elevator.
- 5. May increase elevator margin if interest income and service charges exceed the strengthening of the basis and if competition permits.

#### DISADVANTAGES FOR THE ELEVATOR

- 1. Must assume the risk of basis strengthening by more than the interest income and service charge.
- 2. As expectations about changes in the basis change, the elevator will have to change the service charge. This may require explanations to customers to avoid poor customer relations.

#### ADVANTAGES FOR THE FARMER

- 1. Allows the farmer to move the grain off the farm and into the elevator thereby reducing the risks and losses associated with storing grain such as shrink and loss of quality.
- 2. Allows the farmer to delay the pricing decision until a future date to benefit from a higher price if it occurs.
- 3. May aid in income tax management.

# DISADVANTAGES FOR THE FARMER

- 1. Earns no interest income even though title has been given up.
- 2. Generally pays a service charge for the privilege of pricing later.
- 3. Assumes the risk of declining prices.
- 4. The DP contract is not covered by the elevator bond in North Dakota; security of the contract is dependent upon the financial integrity of the elevator.

In essence, for the farmer, the advantages and disadvantages of the DP contract are similar to those of storing cash grain with the exception of the lack of bonding.

One alternative to the DP contract, or to holding cash grain for a higher price, is to sell the cash grain and replace it by buying futures. Buying the futures must be recognized as a speculative decision no different than holding cash grain or a DP contract. This alternative does eliminate any concern the farmer may have about the financial stability of the elevator.

A variation of the DP contract is the basis contract. The basis (spread between the futures market and the local cash market) is established when the grain is delivered.

Later, when the grain is priced by the farmer, the previously established basis is subtracted from the futures price that particular day. Since the basis has been fixed, the elevator assumes no basis risk when it sells the grain, so the elevator needs only to long hedge (buy futures) these contracts for price protection. In many instances, a cash advance of 50 percent to 75 percent of the values of the grain is made to the farmer at the time of delivery with the balance paid the day the grain is priced. Basis contracts are currently used very little in North Dakota, but as the understanding of futures markets and basis relationships improve, they may supplant the Dp contract because of their risk-reducing attributes.

#### SUMMARY

For the elevator manager, determining whether to store or sell DP grain depends on the service charge, interest rate and changes in basis. The sell option is preferred if the basis strengthens by less than interest income or weakens. The store option is preferred if the basis strengthens by more than interest income. The choice is indifferent if the interest income equals the strengthening of the basis. For the farmer, the decision to use the DP contract is much the same as deciding whether to store cash grain. That is, will the expected price increase be enough to cover the cost of holding? In addition, the farmer must have confidence that the elevator is financially sound and will still be in business when he chooses to price the grain.

**Reference**: The Evolving Country Grain Marketing System, in North Dakota Ag. Economics Report, Ming, Dennis R., Wilson, William W., and Upper Great Plains Transportation Institute, North Dakota State University, forthcoming.