Commodity Markets and the Terminal Elevator

Richard O. Westley

It is indeed a pleasure, and at the same time a challenge, to appear before this distinguished group of educators on the occasion of the Tenth Annual Board of Trade Symposium. Even though it is more than 20 years since my own college days, this reversal of the student-professor relationship is still a novelty.

I can imagine that one of the first questions in your mind is, “Why does a firm like The Glidden Company, principally known as a paint manufacturer, happen to be in the grain business?” You might also be saying to yourselves, “I realize there has been a great deal of diversification in industry in recent years, but what possible connection is there between paint and grain?” The answer is relatively simple, and at the same time is an illustration not only of the drive for greater efficiency and lower costs in industry generally, but also, and more germane to this discussion, it illustrates the importance of commodity markets and their continued functioning on an effective basis.

In the early days of the soybean industry, the founder of The Glidden Company, Mr. Adrian D. Joyce, conceived of the soybean not only as a possible alternative source of drying oil in paints, but also as the best known source of high quality protein for use in what has now become the broad field of emulsion paints. Accordingly, Glidden was one of the early entrants into the soybean processing industry, and very soon found that considerable elevator storage space was essential to the efficient operation of a soybean plant. The company also found itself, quite by accident, in the grain business from time to time, as a matter of using elevator space to produce revenue during off-season periods when the storage was not required for soybeans. It was, then, a logical step to expand into the grain business itself on a year-around basis, since the part-time operator in any field is at a considerable disadvantage, both as to continuing sources of supply and in servicing his customers, compared to his full-time competition.
With the completion of our new elevator on the Calumet River in South Chicago a little over a year ago, we are now equipped not only to handle our soybean acquisition and hedging problems more effectively, but also to take full advantage of the hedging facilities available through use of Chicago Board of Trade futures contracts in our general grain business.

The terminal elevator operator occupies a unique position in the whole fabric of organized commodity markets. In terms of basic economic reason for existence, he functions as a warehouseman for crops which come to market in relatively short periods of time but which are consumed rather evenly throughout the twelve months of the year. He differs from a producer who is interested only in the dollars and cents he receives for the grain he sells and who makes his decision to sell only once or twice a year. The producer relieves himself of all problems of storage, conditioning, insurance, and financing when he sells his grain; at the same time a terminal warehouseman is assuming these same risks and expenses. The terminal operator also differs from the food processor who converts grain to various finished products and who can estimate fairly accurately what his volume of sales and approximate prices will be over a period of several months and always has the alternative of using such judgment rather than sales of grain futures as a hedge against inventories of such raw materials. When a terminal operator buys grain, on the other hand, he has only a general idea when he will sell it, where it will go, or to whom. As a matter of business judgment, he tries to buy the grain at a relationship to the futures market which he feels will yield a profit at some future time, after deduction of the expense of carrying the grain in his warehouse, keeping it in merchantable condition, and perhaps drying and/or cleaning the grain to meet the requirements of his customers. He may also buy grain and hold it unhedged if he so desires, but he could accomplish at least a portion of the same objective by buying grain futures and not using his storage facilities. In other words, he doesn't need a terminal elevator if he simply wants to speculate.

The point I wish to emphasize here is that of all segments of the commodity business, from the producer to the consumer, the terminal warehouseman is singularly dependent upon broad, properly functioning futures markets in the everyday operation of his business. As the holding point, or the surge bin, if you will, between the rapidity of today's efficient harvesting methods and the year-around usage by consumers, it is obvious that he must have an effective means of minimizing the risks of wide price fluctuations and, at the same time, the means of receiving compensation in the form of carrying charges and merchandising margins for the expenses of storage covering the varying periods during which he holds the grain.

Most examples of the use of futures markets for the hedging of grain inventories show how grain is bought at a certain relationship to a futures price and subsequently is sold at a different relationship to the price of that same futures contract. It appears to be almost an automatic process of selling the current future when the grain is purchased, and of buying that same future when the grain is sold.

There are numerous cases where the process is just that simple, but ordinarily it is considerably more involved and requires the exercise of judgment on the part of the hedger several times during the period the grain is in storage.
The first decision is obviously what to do at time grain is purchased. Usually there are four or five delivery months on the board for each grain, with the broadest trade likely to be found in the nearer-by contracts, and considerably less trade in the deferred. Any sizable order, then, is likely to move the deferred futures correspondingly more than the nearby, which is one of the many points to be considered when deciding which month to sell as a hedge against your purchased grain.

Perhaps the most important consideration is the relationship between the various months from a carrying charge standpoint. If the current future is selling at a good carrying charge under the next deferred month, the tendency will be to sell the forward delivery position and, in effect, assure oneself of the carrying charge until that time. This same approach can be carried as far forward as may be indicated by the various relationships.

You are perhaps curious as to what constitutes a “good carrying charge” for a terminal elevator. The term includes not only a storage, but also the cost of financing and insurance. While insurance is not usually of much consequence in a modern fireproof elevator, the cost of financing grain has more than doubled in recent years. At current price levels, for example, it costs about 10¢ per bushel per year to finance wheat, or roughly 1/2¢ per bushel per month. This happens to be just about half the general Chicago storage rate of 1.8¢ per bushel per month. A full carrying charge in Chicago, then, amounts to approximately 2 1/4¢ per bushel per month for wheat at a current price levels. Quite naturally a terminal warehouseman would like to receive full carrying charges for his stored inventories, but unhappily such is almost never attainable, and for obvious reasons. It becomes a question, then, as to how much less than the full cost of carrying can be considered a “good carrying charge.” If the grain being covered is in a deliverable position and is suitable for delivery from a quality standpoint, the operator may wish to hold out for virtually a full carrying charge, since the alternative of making delivery and collecting full tariff storage is readily available. If the grain in question is out of position geographically or is not suitable for delivery from a quality standpoint, the warehouseman will likely prefer to accept a considerably lesser carrying charge, thus permitting him to retain control of his inventory and storage space. The latter often bulks rather large as a consideration in either placing hedges or in shifting them to forward positions. It can be seen, then, that a “good carrying charge” is a relative term which cannot be reduced to a specific without consideration of numerous other factors.

Going back to the handling of hedges, the warehouseman more often than not will have the problem of shifting his hedges from a maturing month to a deferred month before he has finally sold a given lot of grain, assuming that he doesn’t plan to deliver for one reason or another. The same general considerations govern his judgment in shifting hedges as in originally placing them. As a matter of fact, it frequently happens that as relationships between months shift back and forth, he may “backsand” a hedge from a deferred month to a more nearby month to suit changing conditions either in his own position or in the market. My purpose here is not to make the handling of hedges seem unduly complicated, but to point out the fact that hedging requires much the same exercise of judgment and market sense in the area of relationships between various futures months and relationships of cash grain prices to futures prices as is exercised by the speculator in his approach to
price levels. It can very properly be said that to this extent, terminal operators are forced to speculate on cash premiums and discounts as well as relationships between delivery months, but the extent of such speculation is often in fractions of a cent per bushel and almost never in amounts comparable to the swings in the general price level of the market. As you might expect, there are about as many variations in approach to this phase of the business as there are companies operating terminal elevators, and what might be termed an ultra-conservative approach by some could be considered almost the opposite by others.

The third and final phase of handling hedges takes place when grain is sold and the hedge must be lifted. Ordinarily this is the most automatic of the three phases of hedging, since it usually involves simply buying the current future against the sale. Such sales more often than not are in round lots and are made to mills, processors, and feed manufacturers who also carry hedges. Very frequently the futures are exchanged simultaneously with the sale of the grain, thus obviating any necessity of taking a position even momentarily. Even the third phase can be made more complicated, if the operator wishes, by buying a futures month other than the one in which his hedges are carried, thus leaving him with an outright spread in futures.

While I have dealt here with the hedging of inventories, grain merchandising also includes short sales of cash grain hedged in long futures positions, and the same points of decision are involved in reverse.

In this discussion of hedging I have made the basic assumption that grain can be bought at what may be deemed a satisfactory or hedgeable relationship to the futures market. Unfortunately, in recent years that has often been a very risky assumption except during peak periods of harvest movement. It has become increasingly so as the various government support programs have attracted huge surpluses into the inventory of Commodity Credit Corporation. In fact, these surpluses have made that corporation not only the giant of the grain business in all its phases, but a business roughly approximating General Motors in volume. Unlike General Motors, however, C.C.C. has no competition and never makes a profit.

C.C.C. is at one and the same time a terminal elevator operator's biggest customer for warehouse space and his biggest competitor in the handling of grain. They bulk so large, in fact, as customers for elevator space that one can scarcely operate these days without being under the Uniform Grain Storage Agreement.

Perhaps the greatest impact of Commodity's domination of the grain business is the inevitable dislocations which are inherent in any patchwork of man-made economics. You have, for example, the completely paradoxical situation of corn selling at almost identical prices in such widely separated markets as Chicago and Baltimore. Without C.C.C. interference, corn in Baltimore is normally worth about freight over Chicago, or 18 cents per bushel in the case of export corn. Yet as this is being written, C.C.C. is offering corn at 4½ cents over Chicago September F.O.B. vessel at Baltimore and the identical grade is selling freely at 3½ cents over September F.O.B. cars at Chicago. On today's market those flat prices are $1.32 and $1.31 respectively. Since C.C.C. has no magic wand which transports corn from the Midwest to
the seaport for nothing, let's examine this situation in terms of actual cost to the government agency.

Using the average current Illinois loan rate of $1.53 per bushel and adding nothing but freight and handling charges, their cost F.O.B. boat Baltimore is approximately $1.95 per bushel. We have here, then, a direct subsidy of 63 cents per bushel on export corn not including any C.C.C. storage costs. On the same basis, Iowa corn costs $1.99, or a subsidy of 67 cents per bushel and a sizable quantity of Iowa corn is shipped to the Atlantic coast. All this might be explainable in terms of various kinds of inventory management if you didn't have at one and the same time the spectacle of Iowa corn processors frequently being forced to back-haul corn from Illinois to keep their plants running.

In other words, instead of "ships passing in the night," you have corn cars passing each other day and night—C.C.C. corn from Iowa enroute to the Atlantic seashore crossing paths with Illinois corn heading for Iowa processing plants. And in this regard, I am speaking not of some obscure situation but of a condition which has prevailed off and on at various times ever since the huge corn crop of 1948 and the accompanying large C.C.C. take-over of loan corn the following year.

What has just been cited may be a horrible example, yet it is more typical than you may think of the dislocations which have occurred. Since last October Commodity has sold 250,000,000 bushels of corn and just the other day the Department of Agriculture announced that C.C.C. expects to market 335,000,000 bushels of corn this coming crop year. Since we aren't likely to move a total of more than the usual 500 million bushels into commercial channels, you can readily see who is going to set the price of corn and whose corn is going to move. So we will very likely stay on the same merry-go-round with C.C.C. selling corn to keep it from going out of condition and taking over next summer as much or more than their sales for the year. It doesn't leave the cash-grain farmer with much of the market.

As of July 1, C.C.C. either owned or had under support, a total of 1,370,000,000 bushels of corn, or 7/10 of the total stocks in the United States. While we are frequently reminded that this constitutes less than ½ of one year's production, the terminal elevator operator is more likely to remind himself that C.C.C. now owns or controls 2½ times the amount of corn that annually moves into commercial channels. The next question is how long will it be before Commodity takes over virtually the entire free market. Their prediction of next year's sales at the level of 335 million bushels means they will be handling more than 2/3 of the corn merchandising business in this country. How can our markets function properly under those conditions? And how have we gotten into this fix?

To be sure that Commodity Credit Corporation would not become a competitor of private business, Congress announced a policy with regard to the normal facilities for handling and distributing the agricultural commodities to which title would become vested in the Corporation as a result of the defaults. Let us take a moment to examine that policy.
The Seventy-Ninth Congress declared its policy in the Agricultural Marketing Act of 1945. That policy was as follows:

"The Congress declares that a sound, efficient, and privately operated system for distributing and marketing agricultural products is essential to a prosperous agriculture and it is indispensable to the maintenance of full employment and to the welfare, prosperity, and health of the Nation. . . ."

Just two years later, in the Act to provide a charter for Commodity Credit Corporation, this policy was reaffirmed and provision was made for its implementation. In section 5 of that Act, it was expressly provided, and still so provides today, that the Corporation—

". . . shall, to the maximum extent practicable, consistent with the fulfillment of the Corporation's purposes and the effective and efficient conduct of its business, utilize the usual and customary channels, facilities, and arrangements of trade and commerce."

The same policy was expressly reaffirmed again in the 1949 amendment to the Charter Act. In connection with the power given to the Corporation to acquire personal and real property (15 U.S.C. 714b (h) as amended), it was specially provided and so provides today—

". . . That nothing contained in this subsection (h) shall limit the duty of the Corporation, to the maximum extent practicable consistent with the fulfillment of the Corporation's purposes and the effective and efficient conduct of its business, to utilize the usual and customary channels, facilities and arrangements of Trade and Commerce in the warehousing of commodities. . . ."

As a matter of fact, the then Secretary of Agriculture was asked in connection with the hearings held on the 1949 amendment: "Do I understand the Department has taken the position that the Department does not want in any respect to either compete with or supplant the private industry in the grain storage business?" His answer: "That is entirely correct."

Although the policy of the Congress has been, in my opinion, repeatedly declared in unmistakable language, through misunderstanding or otherwise, Commodity Credit Corporation has flouted this policy time and time again. As the years go by and Commodity continues to handle larger and larger percentages of our crops, there is little reason to believe that their encroachment upon the usual channels of trade will not continue. It is conceivable that the time will come when C.C.C. is not just a competitor of the grain trade but, instead, a serious threat to the continued existence of the entire agricultural marketing structure in this country. All this would be a good deal easier to take if we could feel that the program was really accomplishing its purpose. On the contrary, I think it is safe to say that virtually all interested parties are dissatisfied. The taxpayers are showing increasing uneasiness with the $5 billion overall annual cost of the program, the agricultural enterprises with whom Commodity competes certainly are not happy, and even the farmers who are supposed to be the beneficiaries are anything but completely satisfied.
In taking this dim view of the government's role in the grain business, there are certain modifying factors I would like to make clear.

First, I do not accuse C.C.C. of any ulterior socialistic motives in their approach to the problem. They are more in the role of reluctant bankers taking over their collateral on defaulted loans and trying to make the best of a bad situation. They are caught between the twin fires of politically high loan rates and the tremendous technological advancement of agriculture during these post-war years. I think it only fair to say that high support rates have furnished the incentive for much of that advancement.

Second, I would not want my criticism of the system to be misconstrued as a criticism of the people who operate it. For the most part they are capable and straightforward in their dealings with the trade. What may seem at times to be their inflexibility is more often than not a case of their being careful to give everyone equal opportunity. When that great economic leveler, price, ceases to occupy its usual role, other considerations must fill the vacuum.

Third, there has been at least a breakthrough in Commodity's attitude toward turning some of their operations back to the private trade. Last year's revision in the handling of export wheat is an example; also a greater tendency to sell corn at bin-sites off and on. These are steps in the right direction, but much more remains to be done. There would seem to be little reason, for example, why C.C.C. shouldn't go ahead with a corn program using an approach similar to that for wheat.

Fourth, it must be admitted that terminal elevator operators have been proportionately less affected by government domination of the grain business than other segments of the trade. Storage revenues have been steady and the very existence of large C.C.C. stocks has often tended to foster carrying charges. Perhaps we should be lulled into feeling all is well, but I don't think so.

In the end, there is no substitute for the law of supply and demand, and no industry, not even agriculture, can build for a sound future on any other basis. The field of terminal grain merchandising is no exception.

This paper was originally presented in 1957 at the Tenth Annual Symposium of the Chicago Board of Trade.