

Commodity Markets and the Processor

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It is very difficult for a businessman to find himself surrounded by a group of experts. We usually feel the urge to expound on personal economic theories but I am glad to report that I have successfully resisted that urge. Instead, if you are willing, I will avoid theory for the moment and try to give you a description of just how, at the working level, the merchandising operations of a modern soybean crushing plant are managed.

Management practices in this field have changed radically during the past few years. One of the most important reasons for changes is the relatively new feature of the existence of a futures market on the Chicago Board of Trade in both the soybeans and the soybean products, soybean oil and soybean meal.

Although you have undoubtedly heard numerous stories about various products made from soybeans, I can assure you that none of the by-products are of much consequence to the crusher, except oil and meal. A crushing plant simply serves as a conduit through which soybeans move in their natural journey from farm to farm. Five-sixths of the weight of the bean is consumed right on the farm in the form of meal. They simply travel through the crushing plant for the purpose of having the oil extracted. They are then returned to the farm in one form or another to be fed. In the economic sense it is only the oil that moves off the farm. This is an important feature to bear in mind. The crushing margin is a simple calculation of the difference between the price of the beans and the combined value of the oil and meal at a given time. That is the basic feature that the merchandising supervisor of a soybean plant is interested in. Due to the existence of a futures market, which gives him price insurance, he need not concern himself primarily with the price level.

The merchandising department of a modern soybean operation includes four basic functions which usually are managed by four individuals. First, and the most important functionary, is the merchandizing supervisor, some of whose

problems I will discuss later. The other three are the soybean buyer, the oil salesman, and the meal salesman.

The buyer is assigned the duty of buying soybeans day by day as the country appears willing to sell. He is not concerned with the flat price but is concerned with buying the beans at a proper relationship to the nearby future in Chicago. It is also his duty to pay attention to the quality and particularly to the origin of the beans from a freight standpoint. It is vitally important that the actual cash beans he buys have their origin at points convenient to the plant location where they will be crushed. Above all, it is his duty to see that there is an adequate supply of beans ahead of the plant to keep it running at capacity at all times.

The bean buyer has a corollary responsibility and that is to utilize as profitably as possible the company's warehousing facilities. Thus, if cash soybeans are selling at a substantial discount under the deferred future, he will make a greater effort to accumulate cash beans in excess of immediate crushing requirements so as to earn these warehousing charges. On the other hand, should cash beans be selling at a price above the deferred future less the cost of carrying the beans, he will probably be more inclined to let his warehouse space stay empty or use it for other purposes and buy the beans only as needed. Each time he makes a purchase he makes a corresponding sale of a future in the pit and his job is finished.

Another member of this team is the oil salesman. It is his duty to be prepared at all times to offer oil from the plant production to customers convenient to the plant. He tries to be prepared to quote a competitive price every day, regardless of the crushing margin at that time. He is particularly concerned with selling the oil to the proper destinations and for the proper shipping dates so that the entire production of the plant can be shipped regularly. The oil salesman has a corollary responsibility to utilize his company's oil warehousing facilities. Thus, if there is a carrying charge in oil, that is, if the spot oil is selling at a substantial discount below the deferred future, he will be inclined to hold his oil in his warehousing facilities so as to earn this carrying charge. On the other hand, if spot oil is selling at a price higher than the deferred future less cost of carrying, he will be inclined toward selling the oil as it is made, since there is no warehousing charge to be earned. After making a sale, he buys a like amount in the form of a futures contract and his task is complete.

Another member of the team is the soybean meal salesman. Since soybean meal represents by far the largest portion of the soybeans by weight, the freight on this item becomes a very important factor. It is, therefore, his duty to endeavor to have a competitive price at all times, even when the crushing margin is unsatisfactory, so that he can supply soybean meal to the customers convenient to his plant, thus capturing the important advantage of freight savings which accrue to his particular operation by virtue of shipping the soybean meal to proper destinations.

Another duty of the meal salesman is to make extra earnings for his company by utilizing meal warehousing facilities of the company. For instance, if the deferred soybean meal futures are selling considerably higher than the nearby, then he has an opportunity to earn storage charges for the period in question.

In this case, he will be inclined to avoid making cash meal sales for nearby shipment so long as the spot price is considerably below the deferred. The merchandising supervisor being alerted to this situation will very likely be selling the deferred meal futures when he makes his crushing margin trades. On the other hand, if the spot price for soybean meal is above the deferred future, less cost of carrying, the meal salesman will naturally be trying to merchandise his meal for nearby shipment. Having made a sale, he buys a corresponding tonnage in the future at Chicago and his job is completed.

Of course, the merchandising supervisor is looking over the shoulder of these three men—the meal salesman, the oil salesman, and the bean buyer—but he is primarily concerned with fixing the margin between the beans and the products at a time most favorable, in his opinion, to his operation. In a general way it can be said there is very little, if any, relationship between the fixing of the crushing margin and the actual sale of the cash products. Sometimes the merchandising supervisor, who necessarily is a student of futures markets, as well as cash and futures relationships, will feel that the futures prices reflect a satisfactory margin to him even though the cash products have not yet been sold. In a case of this kind, he might have bought these soybean futures and sold the meal and oil futures far in advance of the actual crushing of the material or the shipment of the products. If this is the case, when his buyer and salesmen are making the cash transactions they will simply close out trades in futures already put on the books by the supervisor. On the other hand, there are times for months at a time when speculators are willing to pay more for soybeans than they are worth to a crushing plant. In this case, soybeans might be bought and hedged and the products made and shipped, and the crushing margin still not established. In fact, the merchandising supervisor in some cases might choose to delay accepting the crushing margin until long after these operations have occurred.

Now lest this teamwork, which I have just described, might sound too simple to you I would like to point out that during the last few years an adequate crushing margin has existed only for a few days at a time during the year. Thus, an alert merchandising supervisor might conceivably do a very large share of his year's business in a very short time, in spite of the fact that the cash purchases of beans and the sale of meal and oil are scattered throughout the year. The merchandising manager probably will tend to have faith that sooner or later a proper relationship will exist between the price of beans and the price of the products. All too often this happy situation does not come to pass. Hence, the trials and tribulations of the merchandising manager.

I have heard a number of ideas expressed as to why an adequate crushing margin has not existed during the past several years. One is that the soybean crushing industry is overbuilt. That is, we have more plant capacity than soybeans. Therefore, it is said, the natural resulting competitive scramble causes crushers to be willing to operate at a small loss rather than to shut down at a large loss.

Another cause often advanced is that there is an excessive amount of speculation in soybeans. I do not know what constitutes an excessive amount of speculation but it is true that speculators are often paying more for the soybeans than they are worth, based on product values. This has resulted in a strange phenomenon. Several crushers have made a good share if not all of

their earnings in the recent past by the unique practice of buying the meal and the oil in the pit and selling the beans in the pit when the spread between the products and the beans is considerably less than the cost of conversion. This in effect gives them additional crushing capacity at less than it would cost to own a plant and operate the capacity. Later, when and if the situation rights itself, it is possible to reverse the transaction, that is, buy in the beans and sell out the oil and meal at a relationship which will show a profit.

As more speculators learn this technique, speculation in products might become more active. It is likely that the speculators will sooner or later see the light and a greater portion of their speculative activity will be diverted into the products markets. Indeed there is evidence now that more and more speculators are learning of the better opportunities for speculation which exist in the products markets and the trend seems to be in that direction. A wise speculator, after all, would prefer to own the products if he can buy them at the bean price plus a reasonable conversion cost.

Furthermore, a speculator who has an opinion which he wants to assert usually has that opinion on either oil or meal. The end uses of these two products are not related. If he has a market view on oil it is rather foolish for him to buy beans thereby buying five pounds of meal in the form of beans just to establish his ownership of one pound of oil. Similarly, if he has an opinion on meal why should he buy the beans, thereby indirectly making an unwanted speculation in the oil market. Clearly, he is better off to take his choice of either the oil or meal, thereby limiting his speculation to exactly the commodity on which he has an opinion.

There are even others who blame "strong arm" methods in the Chicago soybean futures for the disappearance of a crushing margin for such long periods at a time. There have indeed during the past several years been at least two cases of which the CEA has taken cognizance. In these cases the price of soybeans in Chicago was abnormally strengthened by strong holdings by speculators in the nearby position. In both cases, not only did the crushing margin disappear but the cash and the futures prices of soybeans lost their natural relationship. Unfortunately for the crushing industry, the CEA in both cases simply sat quietly by and observed these manipulations, took note of the fact that great damage was being done, but didn't get around to filing charges or complaints until several months after the fact. That is like shutting the door after the horse is gone. Many believe that the CEA's methods of policing this matter have been wholly ineffective.

Of course, there are those who say the soybean processors themselves can cure a situation of this kind simply by selling back their soybeans and buying in the products when they can do so at a favorable basis. That may very well be and likely could cure the matter at certain times but it is a very painful process for the soybean crusher to buy back his products, ship his beans to Chicago, and shut down his plant, and he is inclined to feel that he should not be called upon to usurp the government function of acting as a regulator.

There are others who believe that if soybeans could be tendered for delivery on Chicago futures contracts at places other than Chicago these evils would automatically be done away with. I have heard a great deal of debate on this question. Many honest thinking people are on both sides. It is known as the

multiple delivery question. Those in favor believe that if soybeans could be made available for delivery at other points crushers could serve as an automatic regulatory factor by being able to tender their beans on a Chicago futures contract without actually having to ship them to Chicago. These people also say that if an owner of a futures contract in Chicago could receive beans at other terminal points at freight off Chicago, many additional speculators would be interested in assuming a long position in soybeans. Exporters, for instance, would much prefer to own soybeans at freight off the Chicago price in such places as Minnesota where they are in position for export down the Mississippi River. This is just one example. On the other hand, there are those who say that making it so easy for crushers and other warehousemen outside of Chicago to tender on the Chicago futures contract would completely discourage speculators. If this is true, it would indeed be a bad course to follow since speculators are absolutely necessary to the functioning of this market.

Now one of the real questions that I presume concerns this group of people is this: Just what basic function has the existence of futures markets in soybeans and the soybean products performed on behalf of the economy as a whole? I believe that the most important effect of their existence is that it has converted the crushing business from a basically speculative business to a manufacturing operation. The crusher who now has this price insurance available to him, concerns himself primarily with the margin of profit he can get by actually crushing the soybeans. Prior to the time he had this price insurance it was necessary for him to be a speculator at almost all times for, in order to capture the soybeans in this area, he would have to buy the beans when the farmers wanted to sell them and pay the market price. He would have to hold the beans until such time as the oil buyer wanted to buy the oil and the feed manufacturer wanted to buy the meal. Only rarely did these three transactions take place at the same time. Thus, he was nearly always in a speculative position.

The speculative characteristics of his business tended to overshadow the manufacturing side. It was necessary for the crusher to maintain a large working capital which sometimes was idle. He needed it for two reasons. One as a reserve against possible speculative losses and, secondly, to finance his inventories. Under the present arrangement, with inventories hedged at all times, it is a simple matter for a well-managed concern to borrow money from banks for the purpose of carrying inventories and pay only the prime rate. This makes for much more efficient use of capital. I have noticed, too, that there has been a marked tendency on the part of top executives in this industry to pay more attention to manufacturing efficiency. This is a result not only of the fact that the speculative function has been passed on to speculators but the narrowing margins have indeed made it an absolute necessity. If it is true that the existence of this futures market has taken the speculative characteristic out of the crushing business, thereby making it possible for crushers to narrow the spread between the raw material and the finished products, certainly our economy as a whole benefits to that extent.

For these desirable features to continue to be effective it is, of course, necessary for the Chicago Board of Trade to be vigilant at all times to see that the futures market does in fact actually represent cash values and that manipulations of any kind are impossible. It is far better that manipulations

are made impossible by setting up realistic trading rules than to have to rely on government to police this great body. I believe that is the intention of the people who are in charge of the activities of the Chicago Board of Trade. It is the policy of the Board of Trade to encourage open debate and that is one of the reasons for the existence of this Symposium.