

A Processor and Futures Markets

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... I shall describe to you, in some detail, one agricultural processing industry, cottonseed crushing, where the services of futures markets are not generally available. We shall see what, if anything, is done here about risk transference. Then, after brief reference to the soybean industry, where futures markets are available, we may perhaps better understand why they are so useful to a processor. If, at times, I sound as if I am going into unnecessary detail, it is because I am assuming that you know little about the cottonseed industry.

At the outset, I believe we should make some generalities about processors of agricultural commodities to serve as a background for our entire discussion:

1. They have money invested in plants and equipment and the existence of this investment is justified only if it, as such, can make a fair return for its owners.
2. Because the supply/demand patterns of their raw materials and end products are neither stable nor consonant, they are forced to assume a market risk which is not related to their plant investment or merchandising skill.
3. If they could pass this market risk on to someone else in its entirety, nearly all of them would do so.

As I have said, I am going to talk about the cottonseed industry, based particularly upon Anderson, Clayton & Co.'s operations in this field in the Southwest, where my experience has been as an operations executive in the marketing end of the business.

First, a brief word about Anderson, Clayton & Co. as a processor. While we are best known as cotton merchants, we are also large processors of cottonseed in the United States and elsewhere in the world. Through our long experience in the cotton futures markets, we have first-hand knowledge of the value of such markets and have, I believe, been the leader in our industry so far as organized commodity markets are concerned.

We are what you would describe as an integrated cottonseed crusher; that is, we perform, in one geographical area or another, about all the services a cottonseed processor could perform short of growing cotton. This, except for certain scientific purposes, we avoid doing. We are, however, seed breeders, crop financiers (as a supplement to regular bank financing), agronomists, ginners, feed manufacturers, feed lot operators and refiners, and, incidentally, we work very closely with the various colleges and universities in our areas. We do these things because they are beneficial in two ways. They are helpful to producers and, ipso facto, they are helpful to us.

Cottonseed, obviously, is a by-product. Its supply is not determined in any way by the need for its products. It is produced in such quantities as are dictated by the need for cotton fiber. Thus, a cottonseed processor must give more than passing attention to the cotton economy if he is to plan soundly for the future.

Cottonseed is processed into five major products. On a ton basis, it produces:

About 340 lb. of oil (this represents approximately 55% of the value of cottonseed to a Southwest crusher). This oil goes into shortening, margarine, and is the principal salad oil.

About 950 lb. of meal (approximately 35% of the value of cottonseed). The meal, of course, is used to feed livestock.

Also produced are about 440 lb. of hulls for roughage in cattle feeding, about 35 lb. of first cut linters for use in mattresses and other furniture, and about 140 lb. of second cut linters, which are generally processed into cellulose.

We shall talk more about each of these products, but first let us look at the cottonseed itself.

How does this seed find its way to the crusher? Well, the path varies somewhat depending upon the section of country involved and the circumstances surrounding the production pattern of the area.

Generally speaking, however, after ginning, in which the cotton fiber is separated from the seed, the seed is bought from the producer by the ginner, who in turn sells it to a cottonseed crushing mill. In some areas, the seed is sold directly by the producer to the crusher, but the point is that the seed itself and its ownership generally move quickly to its final resting place. There are simply no middlemen who buy and hold cottonseed. It is a bulky commodity, which is expensive to handle, difficult to store, and there is no futures market in which to hedge it. Economics, then, has dictated that cottonseed shall be bought by and stored at the plant where it is going to be crushed.

Cottonseed moves almost entirely by truck. The movement continues for a relatively short period of time; for instance, seed on the high plains of Texas usually comes into the mills starting in early October and finishing (except for a few odd lots) well before Christmas, with by far the greater part arriving between, say, October 15th and December 1st. During this harvest period then, which of course varies by geographical area, a mill must buy its entire crush, though it will be many months before all the products are produced.

Once passed by, cottonseed is gone and there will be no second chance to buy it. Once bought, they are rarely resold.

By and large, cottonseed mills, like soybean processing plants, are located near the source of their raw material. While seed does move rather long distances, as much as several hundred miles on some occasions, most of it is crushed pretty near to home.

The efficient cottonseed crusher of today has a rather sizable investment, typically larger than that of a soybean processor of the same capacity. This is simply because he needs facilities for cleaning, delinting, and storing that a soybean processor does not need. For instance, he must provide storage for practically his entire crush of cottonseed or take the risk of piling it outside at the mercy of the elements.

When we, as crushers, enter the harvest season we are faced with a sort of dilemma. We are going to buy (we hope!) hundreds of thousands of tons of cottonseed which are not hedgeable as such. We are going to have to market the products from this seed. With the exception of the oil, we have no futures market in which we can hedge. (In passing, I might say that there is a cottonseed meal futures market but its terms are necessarily so restrictive that it is useful only to a relatively few crushers.)

Now, I don't mean to imply that we are completely defenseless. Inevitably, the cost of the cottonseed bears some relationship to the value of its products. It is fair to say that some of the risk involved is passed back to the producer in the form of lower prices for cottonseed, though this may be somewhat academic.

Then, too, we can hedge the oil which represents the major portion of the value of the cottonseed, though we must continually bear in mind the fact that we might be on the wrong end of a seesaw if demand for oil and meal, both soybean and cottonseed, coupled with, say, an operative soybean support program dictates rising oil prices and falling meal prices.

In short then, there is no really effective hedge against the value of cottonseed except what might be termed a deliberate marketing program for the products which is based on the supply/demand picture as we see it.

We spend considerable time, money, and effort to paint this picture as accurately as we can on a continual basis. Production and demand forecasts, both domestic and foreign, are carefully constructed. Information for these forecasts is gleaned, for example, from government statistics, other cottonseed and soybean processors, and other refiners, on an exchange basis. I might add here that some of the publications of students such as yourselves on supply/demand factors and price movements have been very useful indeed. A study of these data gives us a pretty good idea of what we think we ought to do.

Now, what steps can we take to implement the marketing program thus evolved? Perhaps the best way to examine this is to look at each product separately.

First and second cut linters are, as the names imply, related but different products. The linters cut off the seed in the first pass through the machines are relatively long fibers and are usually felted in some manner to make cushioning material. On the second pass, most of the remaining short fibers, which are high in cellulose, are removed and ultimately go in the manufacture of cellulose. The prices of these two products do not necessarily move in sympathy.

There is a relationship, however, to the extent that such prices have a correcting effect on supply. Processors can make more first cuts of a lower grade and less second cuts of a higher grade or the converse. High second cut prices and low first cut prices would obviously increase the supply of the one and decrease that of the other. In this way, some of the risk in the value of the lint on the seed can be shifted to the product which is stronger pricewise, but this is a minor protection, indeed.

There being no linters futures markets, our only hedge would, of course, be forward cash sales. Such forward sales, at least in the quantity desirable, generally cannot be made except, perhaps, in a rising market. Obviously, when such a hedging medium is most needed, it is least likely to be available. We are forced then, in the case of linters, to shoulder the risk ourselves and do as good a cash selling job as we can. Naturally, such a commodity is likely to have violent price swings. Since the war, second cuts, for instance, have sold for as high as 16½¢ per pound and as low as 1½¢ per pound. Users tend to buy heavily or not at all. Sometimes it is all but impossible to sell second cut linters in any quantity for months at a time. During such periods in recent years, users have actually accepted consignment stocks to alleviate storage problems at mills. You can imagine your bargaining position when your product is already at your customer's plant.

Hulls fall very much in the same category as linters, only more so. The hull of the seed is removed before the meat is processed into meal and oil. Its principal use is as roughage in feeding cattle. They are normally in heavy demand when pasturage is poor or unavailable and when feed lots are full. Under opposite conditions there is little market for them at all.

A cottonseed crusher is typically long hulls and there isn't anything he can do about it. He can't, much of the time, even judge how large his risk is except in general terms, so important are weather conditions. I have seen hulls sell at over \$35.00 per ton in West Texas and I know that they have been offered at free, f.o.b. the mill, Mississippi Valley, come and get 'em.

Next, we come to cottonseed meal. Here, again, a crusher is typically long. Some of this risk can be transferred by various means, but, generally speaking, the meal content of cottonseed cannot be sold as the cottonseed is bought. Forward cash sales are often possible, but usually not in large quantity. Years ago, many dealers in meal provided a sort of cash futures market, particularly for the smaller mill operators, but apparently the cost of such risk transference was too large and the financial stability of the dealers too small, in relation to the risk itself, because there are not too many of these dealers left.

There is a cottonseed meal futures market available to one geographical area in the cotton belt. In our own case, we have generally found that, although there is some price relationship between this area and our own, the risk of getting in and out of the market is generally as great as the absolute risk itself. I must admit, however, that narrow as this market might be from our viewpoint, it has, at times, served as a useful barometer.

Then, there is the soybean meal futures market here in Chicago. This has been an expanding one and yearly becomes broader and more useful. While it is probably not yet broad enough to handle even all the soybean meal hedging that needs to be done, let alone that of cottonseed meal, it gives promise of at least approaching such depth.

But for the producer of cottonseed meal, this market is not as useful as it would appear to be at first glance. There's a rub. While cottonseed meal and soybean meal, broadly speaking, move price-wise in sympathy because they are interchangeable for many purposes, their interchangeability is imperfect enough and their areas of production are different enough, that a second variable is introduced, i.e., the spread between the two meal prices. Now in general terms, and with all other things excluded, the period of greatest price stability for cottonseed meal is in the fall and early winter, while the same period for soybean meal is likely to be in the spring and early summer. Or, to put it another way, cottonseed meal is much stronger relative to soybean meal in, say, December, than it is in May. This has been true, for instance, in five out of the last six years.

Obviously, it is risky to hedge forward cottonseed meal in soybean meal unless large price depreciation is feared. For instance, a Lubbock, Texas, cottonseed crusher who last November hedged June cottonseed meal in July soybean meal futures, would have had an appreciation of about \$1 per ton in the price of the cash meal, basis then current prices, but would have lost about \$10 per ton on his futures operation. This hardly represents a hedge. There is, then, no effective way to pass on the risk of ownership of the meal portion of seed, except in relatively minor quantities; so, as in the case of the other products discussed, it is simply borne by the crusher.

And so we come to the oil in the seed. Here we do have methods of pricing. We have two futures markets, cottonseed oil and soybean oil, and, to some extent, forward cash sales. While it is true that there are some dangers in hedging only the oil, which we have mentioned before, it is fair to say that we, Anderson, Clayton & Co., generally speaking, in the absence of some operative support program, hedge at least a major part of the oil in seed we buy and we do this on a daily basis.

The pricing of this oil is accomplished to some small extent by forward cash sales but principally by the placement of hedges in one of the futures markets. Naturally, we prefer the cottonseed oil futures market because of the relatively direct relationship. Additionally, in our own case, we are refiners and thus are able to maneuver freely in the cottonseed oil market since we normally have large quantities of the deliverable commodity on hand. But we can and do use the soybean oil futures market when we feel that cotton oil is underpriced relative to soybean oil and is not likely to remain that way. Ultimately, of course, these hedges are lifted at or about the time of the sale of the actual oil.

This, briefly, is the cottonseed processing industry. We, like any processor, attempt to buy our raw material as reasonably as possible and sell our products for a fair price. In this respect we are just like a soybean crusher—with one major exception—unlike them, we have no really satisfactory market in which to sell our risk.

Our friends in the soybean industry are fortunate indeed. It has always been a mystery to many how competent soybean processors go right on making profits with apparently slim or nonexistent conversion spreads. Without going into how this is done in detail, let us say that the job is facilitated by the existence of futures markets. As you all know, there is a futures market for soybeans and for both its products right here on the Board of Trade. These markets are quite fluid and are able to accommodate by and large, most of the needs of the soybean industry.

A soybean processor can hedge his beans, if he fears the price too high, or simply wishes to rid himself of their price risk. He can, alternatively, hedge the beans by selling the products they will produce if he is satisfied with the conversion margin, or he may hedge only one of the products if he is particularly sanguine about the price prospects of the other. Such deliberate speculation, and the emphasis is on “deliberate,” is a most useful tool in any processor’s marketing program.

The soybean crusher can establish his crushing margin before he buys his raw material by “putting on a crush,” as it is called, or postpone fixing his margin until some later date after he has bought his beans. If he is speculatively inclined, he can even crush twice as many beans as he buys!

A final advantage of these markets to a soybean processor, and a real one, is the fact that he can act rather swiftly to reverse his field if he becomes convinced that the tack he was following has become erroneous.

Now, I don’t mean to imply that the soybean processor can do all these things easily and with impunity, nor that the existence of futures markets relieves him of the necessity of being a competent businessman. Natural competition dictates that the obvious is hard to do and that only the competent can long survive. What I am saying is that the soybean processor has a pretty good bag of tools with which to ply his trade.

But, as you have seen, the cottonseed crusher has a quite different row to hoe. He is forced to buy all his seed during the harvest at a fixed price. He must market his hulls and linters, and by and large his meal, at the convenience of the buyer. When he wants to sell, he frequently cannot, even when he is willing and anxious to take lower prices. Fortunately, he can hedge his oil, but because this market is a refined contract, he must, of necessity, be long “the basis” or spread between crude and refined oil. He rarely can reverse his field with anything approaching the speed with which he would like to do so.

Now believe me, gentlemen, I am not here expecting sympathy. We, in the cottonseed crushing industry, enjoy solving our problems as well as anyone does. But what I have been saying, though obvious, bears repeating once more. What a difference it makes when you have the tools with which to work—when you can devote all your abilities and talents to the tasks at hand

with some assurance that you can get the job done, quickly, if necessary. On the other hand, how difficult it is to be faced so often with the inability to act. What a frustrating thing it would be to sit for months in a falling market and be unable to sell even though, let us say, you were the only one who knew it was going to fall.

The common denominator is, of course, futures markets. Wherever they are possible, they are indeed a real help to processors. Where they are not possible or simply don't exist, for whatever reason, they make the processor's job that much harder.

In the case of cottonseed and its products, it is probable that a reasonably good futures market can exist only for oil. Certainly hulls and lint are out of the question. And I see little chance that a futures market could be worked out for the seed itself. Only in the case of meal is there some hope, but here the complications are many and I'm afraid that any really fair contract might be so complicated that it would discourage risk investment. . . .

