

Section 2

Farmer and Country Elevator Hedging

Farmer Use of the Market

T. A. Hieronymus

It's a pleasure to be here. I want to occupy as small a segment of my time as possible with my unprepared formal presentation, and leave as much of the time as possible for questions.

And as par for the course, I want to change the topic before I begin. It says here, "Farmer use of the market," implying the farmer's use of the futures market. I want to add a comma, and then "in connection with his farm business."

Now, thus, I shan't touch on the major use of the futures market by farmers, which is to speculate in precisely in the same way that traders speculate. The greater portion of the clerks in this building speculate; housewives speculate. If you take a run-down of the periodic surveys of the market that have been made by the CEA, giving the address, occupation, and so forth, of every trader active in the market, you'll find a large number of these are speculators, because there are few hedgers and many speculators.

If you look at the occupation of the speculators, number one on the list is farmers in terms of number, and second are housewives. It runs on down the list through physicians and ministers and school teachers and unemployed and so forth.

So you should keep in mind that when you are writing for farm audiences about futures markets, their first interest is in speculating.

But my comments are related to farmers' use of the futures market in connection with their farm business. They can use the futures market effectively to separate the timing of their pricing of grain from its actual purchase or sale.

In the ordinary course of events, the farmer raises grain; he harvests it. He may sell it, or store it and sell it during the marketing season at a later time.

The timing of this relates to the season of the year and to his storage facilities. He can use futures markets to separate the timing of the actual pricing from the mechanical, physical operations of the grain purchases and sales. And in this connection, he can increase—if he does this judiciously—his net price on grain that he harvests.

Thus, futures markets are not a way for farmers to make money; they are a tool to assist him in the making of money. The timing of pricing is a speculative decision.

I understand you have had handed to you a copy of the bulletin I wrote on the farmer's use of the futures market. You can go through that without finding any reference to farmer-hedging.

Farmers need to select the time they sell, and this is a speculative decision. All futures markets will do for them is let them sell when they want to sell; when they judge speculatively, "Now is the time," or on the other side of it, when they judge that, "Now is the time to buy," if you are talking about feed requirements.

And so the market becomes a speculative tool, and they have speculative decisions to make. A farmer with a field of soybeans growing near Kankakee today has to make up his mind when to sell it: Today, tomorrow, next week, next month or next summer or some other time. This is a speculative decision. The futures market will give him flexibility and latitude when he does this, but it won't help him make money. He has to speculate right.

So I would say it's a tool and these are the points I would make: The first is that what I am talking about relates to farm business. The second relates to decision. The third point I would make is that the key to the use, effective use of the futures market is the translation of futures prices to cash prices.

Farmers are pretty good speculators in cash grain. They have been at it a long time, and they are pretty good. They can decide, "If this is an acceptable cash price, I'll take it," and they do a pretty good job of deciding when. But when you put them into the futures market, with the difference between cash and futures, it becomes difficult.

So the key to effective use of the futures market is the translation of futures prices to cash prices, and that is all I am going to talk about this afternoon.

When November soybeans Chicago closed at 279 on September 18, 1964, what did this mean in terms of cash price to a farmer? If he can make this translation, then he can use the market effectively. To do this requires study in the basis.

I distinguish four ways the farmer can use the futures market: One, to sell a growing crop or to sell a crop he intends to plant. Two, to sell a future crop before it's delivered. Three, to purchase feed requirements when the farmer

judges, “This is the right time to buy it,” and four, to speculate in the price of the crop that he has grown without having space for storage.

Let’s start with selling a growing crop, and I will put these examples in terms of soybeans except for buying feed requirements.

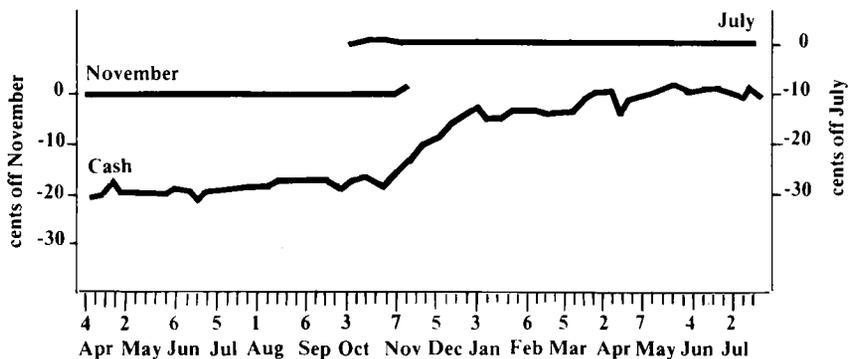
Last March 18, the soybean planting intentions of the farmers for 1964 was announced. It indicated an increase of eight percent in acreage from the year before, and eight percent is a big increase. Thus, a farmer could reasonably entertain the notion of selling his 1964 crop out on the 18th of March, saying, “By golly, this is going to flood the market. The price will go below the loan. To realize something better than that, I had better sell it right now.”

To make this decision is a speculative decision on his part—but he makes it. How does he use the futures market to do it?

The announcement on the 18th was after the close of the market. The close of March 19, 1964, on November soybeans was 247¼. What does that mean to a farmer in terms of his local basis? These local prices have to be put in the terms of location, and the location I will give you is East Central Illinois points.

For a farmer to use the market effectively, he has to know basis at his location, and for you to tell him effectively how to do it, you must tell him in terms of a local basis.

Now, what does 247¼ on November beans mean in terms of farm prices in September, October, and November of this year? This is last March 19. I think maybe we’ve got to put one more basis chart on the blackboard for you.



Soybeans. Weekly cash prices bid to East Central Illinois farmers, November and July futures, and basis chart, average for 1955-62.

Now, when I work over time with basis, I find that the cash price bid the farmers—and again East Central Illinois points—will bear a fairly steady relationship to the line as you see on this chart. It may sometimes be a little higher, sometimes a little lower, up to the harvest, but with no really basic change in its relationship.

And then typically, it will start to gain in relation to the futures at harvest. This is because it costs money to store grain, and it doesn’t cost anything to store a futures contract.

So that this cash line in some pattern or other, will increase in relation to the futures. This is shown in the basis charts I have in the publication you have been given. If you look at individuals years, you will find they deviate, but if you look at a five- or seven-year average of them, this is a typical pattern: that is, the cash staying fairly constant in relation to the futures while the crop is growing and then gaining by the cost of storage.

Now, the trick here last March was for a farmer to decide what does this $247\frac{1}{4}$ mean in terms of how much he might get at harvest?

If he looked back at October of 1962, he found that the farm price was about nine cents under the November price, East Central Illinois points. And if he looked back into October 1963, you would find that this was about ten cents under the November price.

And knowing that this is repetitive year in and year out, he would say to himself. "Well, $247\frac{1}{4}$ means about $237\frac{1}{4}$ net to me, at harvest. Now, do I want to take it?"

This is his question: Net to him, $237\frac{1}{4}$.

If he says, "Yes, I think so. That is above the loan. Eight percent increase in the acreage. The price will go down to the loan or below at harvest; I therefore think I will just sell out right now," so he sells November soybean futures. If he is going to raise 5,000 bushels of soybeans, he sells 5,000 November soybeans. If he is going to raise 2,000 bushels of soybeans, he will sell 2,000 bushels of November futures.

He has a crop growing. He has contracted delivery at what he figures will net him 237. He can sell with the assurance that he will get a net of about 237. How does it work out?

Today is September 18. The price in November futures is 279. He sold these things for 247. (I'll just leave the fractions off for convenience here in arithmetic.) He has lost thirty-two cents in futures. He has sold them for 247 and it's 279 today. He is not happy, needless to say.

But, if he checks the cash market, he will find that today's bid is about 270. The bid is four under, track, and another nickel for the warehouse is 9, to make 279. So 270 is about the right price. He might get an extra penny out of it.

He had contracted for 237. He is actually getting thirty-three cents more than he anticipated for the cash, and he has lost thirty-two cents in the futures, so the market really is paying him a net of 238. It's performed on its promise.

You will find he has lost thirty-two cents in the futures, and is mad at the futures market, but not if he really understood what he agreed to do. Not if he really understood what he agreed to do—he made his own speculative decision to sell for about 237.

So the market is a device by which he can contract forward—and it will work—and fulfill a promise and he can do it quite consistently, but he must remember it is he that made the decision. This is one way he can do it. . . .

Question: Of course, he is gambling either way?

Hieronymus: This is my point. When he sells the soybean contract, it's a speculative decision, just as it is when he decides to increase soybean acreage. I don't like this word *gambling*, but it's a speculative decision, and he has got to make that and live with it.

This is the nature of his business: to speculate on when to sell whether it be futures or his cash crop. Maybe he made the wrong decision and things are tough all over, but he did it.

And all the futures market does is say, "Well, I'll help you do it."

Question: Do you think he had an advantage in reducing the risk, even though he got less than the market paid?

Hieronymus: Oh, you can't really convince him he had an advantage in eliminating the risk in a case of this kind.

Question: They don't mind taking the risk when the market goes up, do they?

Hieronymus: Well, farmers are in the risk business, and they don't really mind the risk. When he figures he has a good sale, he sells. Having sold the futures contract, he is producing to a contract. . . .

Now let me return to this advance sale we had, and the advantage of doing this in the futures market. He sold for $247\frac{1}{4}$. Now, if he had gone down to his elevator and sold for 237, and the elevator made a firm contract, then the seller has to deliver. He is tied right there. Then, prices go down, as November beans went to $237\text{-}5/7$ as the season's low, he delivers at that price. Futures give flexibility. . . .

Question: Now, what happens if the hail comes and wipes out this crop?

Hieronymus: You mean on his own farm?

Question: Yes.

Hieronymus: All right. This is an advantage, too. If he has sold his cash crop at the elevator, he owes those soybeans to the elevator. His futures contract isn't that way at all. He is not going to deliver this futures contract.

We talked of 270 cash price—he gets this at his elevator, and he buys in his futures contract at 279, but these two are completely separate. The latter is done at a broker's wire office. And they are completely separate and never meet and never get together, except in his accounting system, and he had better get them together in his accounting system.

So if he is wiped out by hail, he is wiped out. He liquidates his futures commitment, and he goes on and sells what crop he has left and collects his insurance.

Question: You are not counting brokerage fees in that example, are you?

Hieronymus: No, I didn't. It's roughly one-half a cent a bushel; \$24.00 on a round lot. It's a little over a half cent on a job lot. But he did come out a cent better on the promise.

Let's go to the second example. The second one is concerning stored crop. Now let's say that today the price of November soybeans is 279. The cash price is 270, and while this is a funny thing, it's a real good price, and a fellow doesn't have to have an awfully long memory to think back a year ago when the Russians were buying wheat, and everybody thought soybeans were going to \$3.00 and the NFO took a holding action, and the price did get quite strong, up to 275 or 280 to Illinois farmers, and there were those farmers who held onto last year's crop and there were those farmers that took 240.

And so a farmer looking today at soybeans might reasonably reach the conclusion that he likes this price, "I will sell right here and now."

So he can go down to his elevator and sell at 270. Or perhaps he thinks, "I've got that whole bin out there. I've got money laying around this winter. I might as well tie it up in soybeans. I would like to get paid for storing this crop, but at the same time, I like today's price."

His problem is to look at the futures market and say, "How much is this thing offering me for delivery of soybeans on May 1st?"

And he can translate this. The close on May soybeans today was 287. Now, what does that 287 May futures mean to a farmer in terms of what he can get for his net in his profit next May? If he looks back again to May 1, 1963, he knows that May soybeans were eight cents over the bid to local East Central Illinois points.

Actually, the May, on May 1, 1963, was $259\frac{1}{2}$, and the farm bid was $251\frac{1}{2}$; May 1, 1964, May was $254\frac{3}{8}$, farm price $248\frac{1}{2}$. So cash was eight to ten cents under the future. Let's use nine cents.

So he is 287 minus nine cents, and he thinks, "The market is bidding me for 278 for delivery next May 1st at my country elevator. I think I'll take it."

So he sells the May futures contract. I don't know whether the price of soybeans next May will be \$4.00 or \$2.00 and neither does he. It's a speculative decision, but as long as this difference will hang in there for him, as it does typically, he has a chance to sell for 278. Actually, he can sell now, cash, for 270.

And so he is being bid eight cents a bushel for keeping the money tied up on the farm. This isn't very good storage. This is less than he'll get for storing, but he can have his cake and eat it, too.

He says, "I like today's price, but I don't want to pay for storing." He can do this, and it will work.

Actually, you can rent space in these elevators for eight cents.

Typically, local cash prices, will run further under the future at harvest, so a farmer is more apt to get paid something on the order of eighteen to twenty cents a bushel for storing these soybeans than he is today's eight cents. There is a very narrow basis right now.

I have mentioned it, because I have seen many times when these farmers would rent space in elevators and make a profit, because the operator feels obligated to let the farmer get the storage he wants.

If the farmer cashes in now and sells May soybeans, again, I say, that's a speculative decision. The fact that I happen to agree with it, that it is a good idea, is neither here nor there, because if I were a farmer, I would just drool at this price and make the deal.

It may make me look like an idiot tomorrow by doing it—thank God, not before nine-thirty—but it is a speculative decision that I have the right to make for myself, but I'd better understand what I'm doing.

Now, the third example that I want to give is the buying of feed requirements. On September 16, 1964, the farm price of corn, East Central Illinois points, was \$112½, for new crop corn. The March corn futures was \$126¼. The farmer has some feeder cattle, and he has some hogs, and he hasn't got enough feed. He has got to buy some corn by next spring.

He takes a look at this price and says, "I would like to fix my feed price at that level. I am going to make some money; therefore I will buy futures. I haven't got the storage space."

Now, he is very apt to get the impression that by buying futures now, he can fix this price at \$112½. He can't do it.

What he needs to do is take a look at what the relationship between cash and futures has been in March in earlier years.

On March 1, 1963, the farm price was \$1.13, and March futures was \$118⅞. This is, say, six over. March 1, 1964, the farm price was \$112, the futures was \$118⅞. So here is 6⅞. We'll say 6¼. Subtract 6¼. Now, your March futures is at \$126¼, \$1.20, he'll be paying instead of \$1.12¼. That is, he will be paying somebody seven and a half cents to store his corn.

Then he can make an intelligent decision about whether to pay \$1.20 for feed corn or not. Whether he does it or not is a speculative decision. I don't like it, myself. It doesn't look cheap to me, \$1.12½ looks pretty cheap, but \$1.20 doesn't.

He can say yes or no. Year in and year out, the market will perform for him.

Now, the fourth case here, what many farmers want to do. They don't have storage space; they don't want to pay for storage. "Therefore, I would like to sell my cash soybeans and pay off the bank, and take the money and go down to the local wire office and buy my soybeans back, because I think they are going to \$3.00."

Now, this is a fine idea, and it is consistent with being a farmer. If he raises 2,000 bushels and buys 2,000 bushels in the futures, this is in connection with his farm business. Speculation is his business as long as he stays with the size of the crop he raises.

The question is, how much is he really paying for these beans? He must interpret the cash back to the future, or the futures back to the possible cash.

Let's take this 287 close on the May beans and the 279 bid to the farmer right now, which is probably tonight's bid.

He says, "At 270, I am going to own them, but I've got to deliver them to the local elevator. I'll buy May beans."

What he needs to recognize is this 287 minus his usual May basis; that is, next May this farm price will go about nine cents under, typically. So his price really is 278, and he is going long soybeans at 278 rather than 270. He is going to, in effect, give away eight cents for somebody to store them.

This is exactly the opposite of his storage earning. If he sells the cash and buys the futures, he will be paying somebody for that same storage amount.

He needs to decide, "Do I want to really be paying 278 for beans or not?"

The cash price has to go up a fair amount before he gets a chance to make anything on an upturn in the futures. That is the fourth example.

I will finish my "informal-formal" remarks here by saying that use of futures has two advantages. The first, you can do a little bit better than you can with a cash forward contract, because the elevator operator is going to leave himself some basis, so your net price will be a little better with futures and, secondly, futures have a great deal of flexibility. When it gets dry and you wish you hadn't done it, you can undo it quickly.

Actually, if you sold the March 19 at $\$247\frac{1}{4}$, and then this drought started, and you bought it quickly enough at $238\frac{1}{2}$, you have got a nice net gain right there.

There are two principal areas of disadvantage that I would mention. One is the uncertainty. These bases are variable by years. So it is not absolutely certain, but only certain within fairly narrow limits.

And the second disadvantage I would mention is the misuse of the futures market by farmers, and they can do this well.

One thing is that if they had priced a crop forward by selling the futures, and the price goes up, they don't like to admit a loss. So they will go ahead and sell out the cash crop and let their futures position stand there with a loss on it, and lose some more money.

The second thing farmers like to do is what we call a Texas hedge. They put the beans in a bin on the farm and decide, "This is a good idea." Instead of selling

futures, they buy some futures, so they are long cash grain and long futures both. They do this with great facility, too, and then protest when they lose money. . . .

