Back to the American Meat Institute ten years later. There was an element of “I told you so.” The review of ten years’ experience showed growth, but still a small market when compared to its potential. The mystery of the smallness of markets was still intact.
THINGS LEARNED ABOUT CATTLE FUTURES TRADING

We are approaching the end of the first decade of futures trading in live beef cattle contracts. It has to be labeled an outstanding success. Please keep this thought in mind as I comment, because much of what I will say is critical. I don't mean to belittle the market; rather, I want to say that we have seen only the beginning, and the big growth is yet to come.

In the same vein, I would also comment that, while we have learned a great deal about cattle futures trading, there is much that is unknown, and much, if not most, of the opportunity to study and learn has not been used. There is need for more study that can lead to market growth and development.

SOME STUDIES

Among the things that have been learned that I would first mention is that it is possible to have a successful futures market in a highly perishable commodity. There were grave doubts about this a decade ago. It was necessary to unlearn one of the oldest principles of futures trading that only storable commodities could be successfully traded. Cattle was first, and it opened the door for numerous others, to the general betterment of the industries concerned.

One of the early significant studies of cattle futures was made by Kirtley in cooperation with the Chicago Mercantile Exchange (1). He reviewed the trading from December 1964 through May 1968 and did a cross-section survey of positions on July 28, 1967. The market had grown to substantial size by that time; it was used extensively for both short and long hedging (more short than long). Speculators played a significant roll and came from all kinds of occupations, but were predominantly cattle producers and others associated with the cattle industry, and the risks picked up from hedgers were carried by many people in rather small units. Kirtley noted that, while there had been rapid growth, the open interest and the short hedges were quite small in relation to the number of cattle on feed.

In May 1970, the CEA published the results of a cross-section study made May 29, 1969 (2). The study reviewed the commitments of traders from July 1968, when

cattle futures trading first came under CEA regulation, through October 1969. It found the same pattern that we were long used to finding in grain. There were hedgers opposite hedgers, but short hedges were much larger than long hedges. Long-side speculative positions were much larger than those on the short side. Risks associated with cattle feeding were shifted to speculators. It also showed that the bulk of the open contracts were held by nonreporting traders, both long and short.

The reporting level in beef cattle futures is 25 contracts. At the time the survey was made, the contract size was 25,000 pounds, about 23 head of fed cattle. The reporting level was about 575 cattle, a rather large amount. On the current 40,000-pound contract, the reporting level is 950 head. It is likely that a substantial share of the nonreporting positions are hedgers. On May 29, 1969, 34 percent of the nonreporting shorts were hedgers, and 10 percent of the nonreporting longs were hedgers.

The survey found the same wide distribution, both geographical and occupational, of speculators and the same concentration of hedgers that the Kirtley survey found.

The results of both surveys show that the cattle futures market is basically a risk-shifting vehicle for cattle feeders. The risks go to the speculators. In addition, the market is used fairly extensively by meat packers as a means of fixing procurement prices.

Leuthold [3] examined the pricing performance of the cattle futures market and found that futures prices were less accurate as forecasters of prices at delivery times than were current spot prices. The performance less than six months forward was better than the more distant months. There was a downward bias in futures prices; that is, futures prices generally rose as the time of delivery approached. The cyclic nature of cattle prices and the newness of trading left some doubt about the result.

This study as well as observation of price patterns generally, strongly suggest that the events to come are not well discounted into current prices. The market is not a good forecaster; the quality of speculation is not high. Such a variable market price does not send good signals to producers about the amounts that should be planned for marketing at future times. For a market to work optimally, prices for future delivery should serve as guides that get just the right amounts produced and, thus, contribute to price stability.

**Market Growth**

The volume of trading is frequently cited as a measure of the rapid growth of the cattle futures market. From a monthly average of 4.9 thousand contracts in 1965,
it increased to 14 thousand per month in 1966; to 25 thousand in 1967; 83 thousand in 1969; and finally to 129 thousand per month in 1973. But much of this growth is illusionary. A more appropriate measure of the size of the market is the open interest.

It represents positions, that is, the amount of risks shifted and the amount of money at hazard. The monthly average open interest increased from 3.3 thousand in 1965 to 19.8 thousand in 1967; declined to 12.9 in 1968; rose rapidly to 25.7 thousand in 1969; fell to 14.5 in 1970 and 14.9 in 1971. It averaged 24.0 thousand in 1972; 28.1 thousand in 1973; and 24.7 during the first eight months of 1974. Two things are apparent: first, the market increases in size when prices are volatile and decreases when they are stable, and second, a comparatively stable plateau has existed for three years.

How large is the market? At the end of August 1974, total open contracts were 24,394. This is approximately 927,000 fat cattle. The short hedges were 11,604, and the short positions of nonreporting traders were 9,049. If we assume on the basis of the 1969 survey that 34 percent of the latter were hedges, the total short hedge position is 558,000 head. There were about 10 million cattle on feed on July 1. About 5.6 percent were hedged. The long hedges amounted to about 110 thousand head. Cattle slaughter during July 1974 was 3.1 million head.

It is readily apparent that only a small proportion of cattle producers, feeders, and slaughterers make use of the cattle futures markets. Rarely is the total open interest as large as 10 percent of the cattle on feed.

Perhaps more important, there is not much systematic speculation in cattle prices. On August 31, 1974, the long-side speculative positions were 867,000 head, and the short-side speculative positions were 290,000 head. This covers a whole 12-month period of maturities. Slaughter during the next 12 months will amount to about 35,000,000. Not very many cattle are involved in the speculative pricing process.

To press the point a bit further, on September 27, 1974, the open interest in August 1975 cattle was 612 contracts, about 23 thousand head. Not very many cattle, people, or money were involved in the judgments that put the price at $45.25. It is not at all surprising that the far-out cattle prices eventually prove to be quite inaccurate. Not much goes into their formation.

**Usefulness As A Hedging Market**

While the market may be small in relation to the total risking-financing job of the industry and the speculative price formation is of fairly minor significance, the market is a useful tool for those cattle feeders who elect to use it. As is well known, the past year has been one of serious losses for cattle feeders. One must
sympathize with cattle feeders. But our sympathy is blunted when we recognize that losses were avoided by those feeders who elected to hedge their operations.

While I have not done the detailed arithmetic, I am certain that most of the time during the past 12 months it was possible to buy feeder cattle and feed, and sell fed cattle simultaneously, at profitable feeding margins. Most of the losses incurred were the result of speculating on the short side of the feed market and the long side of the cattle market.

For those periods of time during which the package of feed, feeder cattle, and fed cattle prices did not offer a profit, the cattle feeders had the option of refusal, of sitting on the sidelines, until price relationships were forced back into line.

One lesson that should have been learned from the experience of the past year is that hedging should be seriously considered as a strategy alternative to speculation in feed and cattle prices.

A thing that is interesting to consider is: What would have happened had the whole of the cattle feeding industry decided to hedge profitably or stand aside? If we think in terms of 10 million cattle of feed during the year, it becomes readily apparent that short hedges would have averaged about 263,000 contracts. For the market to be liquid, the open interest would have to have been at least 50 percent greater, or 395 thousand. This is 16 times more than actually existed. Had everyone decided to hedge all at once, I do not think that it could have been accomplished. The necessary speculation would not have been forthcoming. Feed and feeder prices would have been forced up, and fed cattle prices forced down, so that feeding margins would have been unprofitable. Had cattle feeders insisted on profitable margins in hand, or stood aside, the industry would have ground to a virtual halt.

What this exercise does is demonstrate that the whole of the cattle-feeding industry cannot divest itself of price risks until the speculative fraternity is greatly enlarged. Perhaps the necessary speculation would have come forth, but I doubt it. If the goal of a cattle-feeding industry free of price risk is to be achieved, it will have to be done gradually over a period of time. It will be necessary to recruit and train a lot of new cattle speculators. This is not cause for great alarm. Cattle feeders will be slow to learn that they really should keep their risks at manageable levels.

CAN AN OPERATIVE PACKAGE BE PUT TOGETHER?

The total package involves four futures markets. First, fed cattle. The growth and development of the past decade suggests that the speculative potential is present. It will take time. Second, feeder cattle. The open interest in feeder cattle futures was twice as large on September 30, 1974, as it was on September 30, 1973. This
is rapid growth and quite encouraging, but it is still a very small market. I doubt that it will become as large as the fed cattle market. There is not the compelling need to sell feeders forward that there is for fed cattle. It will be very difficult to develop a large short speculative position, for speculators have a predilection toward the long side. Nor is it necessary to have a feeder cattle futures market as large as the fed cattle futures market. Cash feeder cattle prices can be forced into line if feeders insist on profitable, locked-in margins or stand aside. Third, grain sorghums. Futures markets for grain sorghums have been tried by the Chicago Board of Trade, the Kansas City Board of Trade, and the Chicago Mercantile Exchange during the past quarter of a century, and none of them have worked. It appears to be too specialized a commodity, and the corn futures market works too well. The necessary speculation does not come in. But corn is the applicable commodity for much of the industry and is reasonably usable for the rest. Fourth, soybean meal. This market appears to be quite capable of absorbing all of the long hedging that the cattle-feeding industry is apt to do.

A total package can be put together, and it appears to be in process.

CONCLUSION

Some conclusions stand out. First, there is a viable futures market in fed cattle that can be used effectively for risk shifting and financing.

Second, the market is not used very much, and the recent history of the cattle-feeding industry suggests that it should be used more. Encouraging to the growth prospects is the fact that there is a great deal of contract feeding. Reduced to its essentials, contract feeding is a clumsy and nonliquid system of separating feeding and speculating in cattle prices.

Third, there is little evidence that the development of cattle futures trading has resulted in improved price formation. The quality of discounting events to come into current prices—and directing the output of the industry in a way that stable prices result—is not high.

Fourth, I think that the reason that speculative pricing is of ordinary quality is that there is not much of it. We need more and better speculation. The development of this is the biggest task that confronts futures-trading institutions.
LITERATURE CITED

(1) Kirtley, M. B. Users of Livestock Futures Markets, Department of Agricultural Economics, University of Illinois, AERR 94, October 1968.

