

Some Observations Concerning Livestock Futures Markets

by
Roy V. Edwards,
President, Wilson & Co., Inc.

I am pleased to have this opportunity to visit with you for a little while about livestock futures in general and hog futures in particular. I especially appreciate this chance to commend the Chicago Mercantile Exchange for its prime contribution during the last few years by virtue of the leadership demonstrated in establishing and promoting its livestock futures markets. Not only did the Exchange accurately identify a growing need that was evolving out of our livestock economy, but it also had the ability and perseverance to implement a program — to actually establish futures markets that have proven to be workable. As all business managers know, it is relatively easy to talk about various potentially desirable developments, but causing them to happen is the really big job.

It is my desire to spend a few minutes on three rather closely related areas. First, I think it appropriate to dwell briefly upon some of the fundamental changes that served at least in part to support the premise that the time had arrived for livestock futures markets to serve a meaningful role in our livestock marketing structure. Secondly, we wish to offer a few comments about the trading volume on these markets, and finally, venture a few observations concerning future directions.

We run little risk of overstatement by saying that American agriculture is truly undergoing a revolution, one that is primarily technological, and one that is serving to re-shape both its economic structure as well as social values. As Don Paarlberg of Purdue has so clearly pointed out in recent talks, agriculture is

FUTURES TRADING IN LIVESTOCK

rapidly losing its uniqueness. It is becoming more like other businesses, more like industry generally. Perhaps longer than anyone else, farmers have been production oriented. But now, on every hand, we can see evidences that agriculture is rapidly entering the mainstream; along with other business groups, it is becoming market-oriented and increasingly aware of the benefits of meeting the needs of its customers. This is a change in attitude that parallels business success in other fields, namely, there is no economic reason to produce a product unless you have profitable markets.

Let me underscore the word *profit*. The farmer is no longer pursuing his vocation as a way of life, but rather as a businessman — he has, and is, becoming truly profit-oriented. While it may put me ahead of my story, I will point out here, at least parenthetically, that forward contracting is one of the quickest devices available to any agricultural producer to build a predetermined profit margin into his operation — to give real meaning to profit and market orientation.

Another key characteristic of this agricultural revolution currently underway is large scale specialization. As farm wage rates keep climbing in sympathy with urban wage scales, farmers are increasingly motivated to become more mechanized and automated, to substitute capital for labor. With the upsurge of all forms of technology, past concepts of optimal size of operations have been scaled radically upward. Specialization has already come a long way in the fed-cattle industry, with over 40% of fed-cattle marketings coming out of feed lots with a capacity of 1,000 head or more. This percentage, from a 1964 survey made by the National Commission on Food Marketing, is surely larger today. A cattle feed lot with 1,000 head capacity requires a total capital investment of over one-half million dollars and there are literally hundreds of lots that are substantially larger in size and that tie up several millions of dollars in capital in each such operation. Even the traditional small farmer-feeder of Iowa, Minnesota, and the eastern Corn Belt is in process of either expanding or thinking hard about alternative enterprises—whether this be a cash-grain operation, specialized hog production, or urban employment.

EXPERIENCE IN THE PRACTICAL USE

Turning for a moment to trends in hog production, we learned from the recently published U.S. Census of Agriculture that the number of farms from which hogs were sold in 1964 showed a reduction of about one-third from the level of 1959. But since the total number of hogs marketed showed an increase, the number of hogs sold per farm went up sharply. This rapid trend toward specialization in the hog enterprise is expected to continue, and since I have at hand a couple of projections from Purdue on Indiana trends, I will read them to you: The number of farms reporting the sale of hogs dropped from 80,000 in 1954 to 48,000 in 1964, and is projected to a level of only 25,000 by 1974. Concerning the number of hogs sold per farm in Indiana, we have an increase from 66 as of 1954, to 156 head by 1964, and this number is projected to double—to a level of 320 head—by 1974. These numbers tell us, I think, at least two things: Specialization is taking place quite rapidly, but it has by no means acquired the dimensions of the cattle industry in terms of capital requirements for a typical commercial operation. Depending on the exact size to be compared, I think we can say that capital investment for hog operations may run only about one-fifth those of a cattle feeding enterprise.

Granted, the number of farms selling more than 1,000 hogs per farm is growing at an extremely rapid clip—for instance, in Iowa and Illinois, these farms have tripled in number in only the past five years. Farms with this degree of specialization accounted for about 10 per cent of the total number of hogs produced as of 1964, and it is surely larger in 1967.

With this growth toward larger operating units and more specialization, it is apparent that enterprise diversification can no longer be relied upon, as in the past, as a means of spreading price risk. Yet, at the very time that this form of price insurance is disappearing, the need for reduction of risk is being sharply increased. In short, the higher the total investment in an operation, and the less equity that the management has in the business, the less risk the firm can afford to bear. Put another way, the greater the odds that a year of bad losses will eliminate or greatly reduce the activities of a firm, the more important it becomes to shift those risks that can be so transferred to another party.

FUTURES TRADING IN LIVESTOCK

While oversimplified, the demand to shift livestock price risk in the years ahead may be closely correlated with the rate of growth in specialization and capital requirements.

In passing, we might take note of the fact that, unlike the red meat industry and its establishment of futures markets, the broiler business moved toward full-scale integration as a risk reducing device for the broiler grower. The latter, in this form of organization, shifted his price risk to the hatchery or feed dealer or processor by means of contractual arrangements. In appraising the features of integration, the broiler industry has been learning that it is not a price risk-reducing device—at least not as late as 1967. In fact, several segments of this industry are apparently now strongly advocating the establishment of a broiler futures market, and understandably so.

Turning now more directly to our Livestock futures markets as they have operated during their relatively short history, we, of course, know that trading volume in hog futures has been extremely modest, relative to the highly successful cattle contract. Perhaps one of the key reasons, as touched upon in my background remarks, is the fact that specialization and commercialization have not advanced nearly as far at present in the hog industry as in the cattle business. I think there was considerable awareness of this difference when the contracts were first established, and hence the cattle futures market was expected to fare somewhat better. Perhaps, we were not fully prepared for as much difference in trading volume between cattle and hogs as has materialized, and this has naturally brought some disappointment.

However, I am among those who believe that we can and ultimately will have a successful hog contract, and all that we basically need to achieve this goal are two things: a degree of patience, and some further education appropriate to the individuals and groups involved with this contract. By way of reasons for this viewpoint, I would first of all stress this factor: The combined forces of more specialization, more forward contracting, and much larger capital investments in the hog production enterprise are now rapidly underway, but they have really gotten only a good start in relation to where we may ultimately be headed.

EXPERIENCE IN THE PRACTICAL USE

Therefore, the passage of time alone seems certain to bring with it a growing need for the valuable service that can be provided by a viable hog futures market. At those times when we may get especially impatient with the lack of action in hog futures in the months ahead, I suggest that we remind ourselves of how patience paid off in the case of the pork belly contract. As you know, this futures market was established in early 1961, and then proceeded to limp along for over three years with a trading volume that was even less than what we have experienced in the hog futures market. I am not suggesting that hog futures will take off like a rocket, as did the pork belly market, although stranger things have happened. More likely, the growth will be gradual, depending in part upon the effectiveness of our own educational efforts.

Concerning this all-important matter of education, we know that several individuals and groups have worked hard during the past 1-1/2 years in attempting to bring about an adequate understanding of hedging operations among hog producers. The task has been difficult, not only because the potential hedging audience includes so many relatively small and dispersed producers, but because all aspects of a successful hedging program are more complex in nature than we sometimes realize. It is perfectly understandable that a hog producer should want to understand exactly how he is going to come out if he were to initiate or authorize a hedging operation. This is often difficult to explain in one quick lesson, even for a good teacher and an apt pupil.

By comparison, the educational task involved with our Wilson contracting program was much easier, even though it was geared directly to the futures market. Very briefly, we have been offering producers a specific dollars-and-cents price for cattle and hogs to be delivered in a given future period at any one of our packing plants. This price is based upon the futures option nearest the expected delivery date and, once an agreement with the producer is signed, Wilson immediately sells an appropriate number of contracts in that option. Contracts are bought back, of course, when the livestock is delivered for slaughter.

Now, with this type of contract between producer and packer, it is not at all essential for producers to understand hedging

FUTURES TRADING IN LIVESTOCK

principles and procedures. They are, of course, often interested in the factors determining futures prices, and also our price differentials between Chicago and our plants, and our buyers do their best to explain these matters as clearly as possible.

Over the past year, our country hog buying staff has personally discussed our contract and its futures market involvement with hundreds of producers and, as you would guess, it has been both a gratifying and a somewhat frustrating experience. To give one brief example of each, we have been most pleased to confirm what we always thought was true, namely, that the overwhelming majority of producers will voluntarily honor their signed contracts for future delivery, even when the price turns out to be lower than the cash market at time of delivery. By and large, these men viewed their forward pricing operation as a means of "locking-in" a predetermined profit on their planned production; they had looked at our offering price for the finished product, and then determined that their operation was sufficiently efficient to assure a satisfactory profit; they then made their price commitment and, from that point forward, the vagaries of the cash market were of no concern to them—they were too busy concentrating their energies on achieving maximum efficiency in production. This is where they had talent to apply, and this is where they had control of their environment. In short, these particular hog producers were operating like businessmen.

As to another type of experience—which you will recognize as an area calling for further educational effort—numerous hog producers have looked at the schedule of futures prices throughout the past year, and were confident that such prices were too low—that the ultimate cash market was bound to be higher. While there are several implications here, I especially want to dwell for a moment on the pricing function, and how we might establish somewhat better understanding and confidence in the country concerning futures prices.

First of all, the producer must have a clear picture of the basic responsibilities of the long side of the market, and the economic role of the professional speculators. It needs to be made more clear that this latter group is the prime influencing factor in establishing futures price levels, that their degree of business

EXPERIENCE IN THE PRACTICAL USE

success is dependent upon their ability to accurately forecast prices, and that competition among competent speculators will automatically direct prices toward those levels that are expected to prevail as a result of supply and demand conditions in any given future period.

Secondly, and this is crucial, confidence among producers in this process will be accelerated when they know that well trained professional analysts are continually at work in providing a basis for the speculators' trading actions. Conversely, when producers hear stories of how doctors, dentists and other laymen enter and buy orders with no apparent professional analytical guidance, questions arise concerning the scientific soundness of futures price levels—and understandably so.

In a slightly different vein, I agree with those observers who believe that our new livestock futures markets do tend to place greater responsibility than ever on speculators, since the future level of livestock production can be importantly affected by them. Unlike annual crops such as wheat and soy beans, where the harvested acreage may be little influenced by the level of futures prices, it seems entirely possible and probable that prices in the more distant futures options for livestock will substantially affect the volume of livestock production, especially when these markets grow to further size and stature. But this is as it should be—soundly functioning futures markets can be trusted to guide production, and I believe they will contribute to a greater degree of price stability than would otherwise exist.

To take a simplified illustration, the professional market analyst is going to be motivated to purchase futures contracts in the cattle market when he observes that the current rate of placing cattle on feed is very low, and that the future rate of production will not be enough to satisfy consumer demand at the prevailing market. This will tend to drive the futures prices higher, and as they reach a point where it is profitable for the producer to produce the livestock, he then has an opportunity to simultaneously sell futures contracts and begin the production process. Now as these hedges are placed, the price of the futures will tend to decline and this is as it should be; a build-up in futures sales is telling the professional analyst that more production is on

FUTURES TRADING IN LIVESTOCK

the way, and the futures price is his means of signaling the producer that a change in supply and demand conditions, in the delivery month in question, is taking place.

However, let us note that if the producer should be motivated by a relatively favorable futures price to go ahead and increase his production, but does so without hedging, then his actions are not immediately known and registered in the futures market, and the ultimate cash price will likely tend to be lower than the futures price. In this situation, the futures markets can hardly perform their function as a director of the flow and level of production with maximum effectiveness. Unfortunately, I fear there is no easy solution to this kind of misuse of the futures market, but it would certainly help if we had more frequent, reliable industry statistics on livestock production changes. For instance, if weekly placements in commercial cattle feedlots were available—rather than those for the past quarter or even last month, production adjustments could be made that are not now made, due to lack of knowledge.

The point that I wish to make is that the growth of a large and valuable livestock futures market places critical responsibilities upon the professional speculator that he cannot ignore. He must be a professional price analyst in every sense of the word, applying not merely art but every scientific and statistical tool that modern management has to offer. He must become not only skilled in appraising the future movements of variables that are associated with livestock prices, but he must then also, of course, be able to measure the net effects of these forces and arrive at forecasts that have a high degree of accuracy. While you may feel that I place more stress than necessary upon this analytical function, especially since the analyst is already heavily motivated to do a good job simply in the interests of staying alive, it should also be clear that our entire industry has something at stake here by virtue of the fact that futures prices can influence the industry's future volume, and this is a responsibility that cannot be taken lightly.

The year, 1968, promises to be both an interesting and challenging year for our livestock futures markets. While I can speak freely for only one company, I know that Wilson is going to work

EXPERIENCE IN THE PRACTICAL USE

just as hard or harder in 1968 on our hog contracting program than in the past year. I am also confident that numerous other strong and active supporters of the hog futures market during the past year will continue to do so. With all of us working effectively together toward a common goal, the year ahead is bound to be an encouraging one for our live hog futures market in terms of most any standard of performance that we want to see.

Paper presented at Live Hog Futures Study Conference, Chicago on November 16, 1967.