

AUTHOR'S NOTE

I was invited and did present a mundane paper at a study conference sponsored by the Chicago Mercantile Exchange. But as I prepared the paper, some less than flattering things about the operation of exchanges and commission houses occurred to me. Although I did not include them in the mundane paper I presented, I wrote them down and supplied them to officials of the exchange in an attempt to remind them of their longer term responsibilities.

The initiation of futures trading in nonstorable commodities, such as cattle and hogs, opened up new problems in contract terms and new concepts in the functions of futures markets. First among these was the role of speculators. If markets were to fulfill their new role in ordering and guiding production, an improvement in the quality of speculation was needed. The paper "New Concepts in Futures Trading" was an attempt to point out the new role, the need for emphasis on speculation, and the responsibility of the exchanges in the development, care, and feeding of a new, improved breed of speculators.

NEW CONCEPTS IN FUTURES TRADING

CHAPTER 23

Cattle, hog, and fresh egg futures markets are new departures in the field of futures trading. Two of these new markets established by the Chicago Mercantile Exchange are working, and the third is not. I wish to look at some of the new concepts and at the things that may be needed to assist in the success of the new markets.

At the outset, I should like to commend the Chicago Mercantile Exchange for the innovations made in recent years. These have been forward-looking steps that have already enhanced the position of the Exchange (and the value of the memberships). You should continue to look ahead, to change, and to improve.

NEW CONCEPTS

Although we have long looked at futures markets as risk shifting and pricing arrangements, they are, in the final analysis, financial institutions. Their business is furnishing equity capital. Historically, futures markets have been mainly concerned with furnishing capital for carrying inventories of stored commodities. This has been accomplished by hedging, by which risks of price change associated with stored commodities have been shifted from hedger to speculator. This shifting has enabled the hedgers to borrow from the banks at prime rates of interest. The equity capital with which price changes are absorbed is furnished by the speculators who buy the hedges.

The new game, recently started, is the equity financing of production. It has been brought about by the increasing commercialization of agricultural production that has greatly reduced the ability of primary producers to carry the risks of price change.

Agriculture is changing rapidly. Production is becoming more specialized, concentrated, and commercialized. Out-of-pocket costs are becoming a higher proportion of total costs. Producers are using an increasing proportion of borrowed capital. Farms, those engaged in poultry and livestock production in particular, are becoming factories that buy a high proportion of their inputs. They are operating on increasingly thin margins. Thus, change in the selling price has a major effect

T. A. Hieronymus is professor of agricultural economics, University of Illinois. Paper NOT presented at Study Conference, Livestock and Meat Futures, sponsored by the Chicago Mercantile Exchange, Chicago, November 30, 1966.

on net return. A moderate change in price can easily halve or double the net profit. Because of these changes, primary producers are losing their ability to carry risks of price change and are looking for ways to produce at firmly contracted prices.

The method of accomplishing the objective—reducing producer risks—which is coming to the forefront is forward pricing through futures trading. As this system grows and expands, products will be produced to firm prices for delivery at the completion of production. As this occurs, the capital to finance production will be forthcoming at minimum interest rates.

The equity capital necessary to carry the risks of price uncertainty and variability is furnished by speculators. Studies of the older futures markets indicate that speculators furnish this capital at very low or even negative rates of return. It appears that speculators, as a group, lose money or at best break even minus the cost of commissions. They do this because of the leverage that minimum margin requirements makes possible. They hazard a small amount of money in exchange for the chance to make a large amount.

As capital to finance producers is furnished at minimum rates, the competitiveness of producers is increased. They are freed to concentrate on efficiency of production. A workable system of forward pricing of productions will lower costs, just as a hedging system for stored commodities has increased marketing efficiency. This is economic progress and contributes to the welfare of the nation.

The most important single problem in agriculture is the expansion of markets. As markets for products expand, more resources, particularly people, can be retained in agricultural production. Our agricultural markets are no longer based on the necessity to consume food; rather, they are based on the desire to eat better food. The markets into which we sell no longer need to consume only those foods that can be efficiently produced but, because of our productive capacity, their prices can direct the marketing and production system to furnish the products that are wanted. We must now produce to orders from consumers. At this time, market growth is dependent upon good merchandising and new product development.

Price stability is essential to good merchandising programs. One problem that we have had in the past in increasing consumer expenditures is variable prices. This has been and is particularly true of the livestock and poultry sectors. Price stability should be maximized. It is not possible to totally stabilize price. There are vagaries of nature, changes in technology, changes in consumer behavior, and inadequacies of knowledge that make some price variation inevitable if prices are to direct the production-consumption system. Yet maximum price stability must be our goal. The fundamental goal of futures trading must be a set of prices that so effectively guides production and consumption that prices remain stable.

Futures markets live on price variability. Their goal must be to put themselves out of business.

SPECULATORS

The equity capital for production is furnished by speculators to the extent that producers forward-contract through futures markets. By doing this, the speculators gain control of production. The forward prices that are established by trading between producers and speculators order and direct production. As the distant future prices are bid up by speculators, production is increased. And as they fall, production is retarded. Speculators control prices to the extent that producers and buyers contract forward.

The responsibility for price stability rests on speculators in futures markets. The quality of the job that they do will ultimately determine the success or failure of the markets in achieving the broader objective of price stability.

It is true that speculators will carry the risks of price variation, sometimes profiting and sometimes losing, whether they do a good job of pricing or not, but this only partially improves the performance of the system. Major attention must be paid to improving the quality of the job that speculators do.

The intention of every speculator is to make money. The success of the speculator depends upon his ability to forecast prices. There are other considerations in successful speculation, but the forecasting of equilibrium prices is fundamental and determining in a fully competitive market. Speculators must analyze the quantities that will be consumed at a series of prices at specified times in the future—specifically the delivery months. They must analyze the quantities that will be furnished at a series of prices in the future. They must not be unduly influenced to the extent that they project the current supply, demand, and price situation into forecasts of prices at future times. In contrast to the inventory hedging markets, these new markets are truly forward contract markets; they are supply determining.

To the victor belongs the spoils; to the more skilled forecasters will go the profits and to the less skilled will go the losses. As the speculators, as a group, become more skilled, the less it will be necessary to adjust prices as the forward contracts mature and the prices become more stable; and the less will be the remaining profit opportunities.

WHAT THE MARKET MUST DO

All of this is by way of a preface to what the market must do to achieve its full potential. I shall list three principal things. First, it should teach forward con-

tracting through futures trading to producers, buyers, processors, and distributors. The history of most futures markets is that they are built on forward contracting hedging; the need to shift risks comes first, and where there is risk and price variability speculation follows.

This is a big teaching job and requires a large and continuing effort. Producers, in particular, must be taught how to contract forward, the way in which their trading activities are related to their production operations, the relationship of their cash prices to futures prices, and how to account and relate profits and losses. This is what this study conference has been about. More important, they must be taught not to speculate. The Exchange and public agencies, such as the Cooperative Extension Service, can do some of this teaching, but the bulk of the effort must be made by the commission merchants. They are the only ones who can do the job because they are the ones who directly profit from the generation of new business.

Second, the market must help speculators make money. Speculators must be furnished a flow of information that can be used in forecasting, and they must be taught to use the information in making forecasts. Unfortunately, before these things can be accomplished someone must learn what information is pertinent and how to use it. Then the speculators must be taught to avoid mistakes in capital management, of letting mistakes in forecasting become too expensive, and overtrading. This latter is necessary if the lives of the speculators are to be preserved long enough for them to learn to forecast; keep them alive first, and then teach them to forecast.

Third, the market, the members of exchanges in particular, must continually and carefully examine contract terms, trading procedures, and business practices of commission merchants to see that all facets of the futures trading mechanism are operating in the best long-run interests of the outside customers, both hedgers and speculators. In making this comment, I am not levelling criticism against existing terms, procedures, and practices on the Chicago Mercantile or any other exchange. Rather, I want to suggest that the exchanges have a semi public-utility role to play and that there are many things about futures trading and commodity exchanges that are not fully known, and some of the things that are known are not fully understood.

To achieve its maximum potential and to fulfill the financing mission, a high proportion of the total production of cattle, hogs, eggs, and, eventually, other products must be brought within the forward-contracting system. If the objective of achieving sophisticated price forecasting and discounting is to be accomplished, a large and skilled group of speculators must be drawn in and retained. The market must operate in the best interests of these two groups. This may not serve the profit maximization objectives of all of the members of the exchanges.

Exchanges must not be run for the benefit of their members but for the benefit of commission house customers and speculating members. These are not mutually exclusive. Those things that serve the best interests of hedgers and speculators also serve the best long-run interests of most of the membership. The achievement of the semi public-utility role places a heavy burden of responsibility on the exchanges. They are democratic bodies, run by the membership. The high degree of democracy present in the government of commodity exchanges makes them somewhat resistant to change. They must continually prod themselves to take a careful look and change where change is needed. Improvements often hurt some of the membership, particularly in the short run.

I should like to suggest some areas in which more knowledge is needed. The results of such research may vindicate existing rules and practices, or they may suggest changes that can better enable the markets to fulfill their roles. I am not suggesting critical investigation, but constructive research.

First, I should like to suggest careful study of the structure of the open interest in the various commodities traded, particularly cattle, hogs, and pork bellies. Prior to the inception of cattle futures trading, I argued that the success of trading would depend upon the use of the market by feeders as a forward-pricing system. I thought that it would be so used. I should now like to know the extent to which feeders use the market, how the use relates to their feeding operations, and the trading results. These things would be useful in directing further educational and promotional efforts.

I have long since been fascinated by the large open interest in pork bellies in relation to storage stocks. A detailed knowledge of the structure of the open interest in bellies would yield totally new and unique insights into futures trading. Similarly fascinating is the failure of skinned hams to trade in volume even though the commercial situation and price variation is closely comparable to that of bellies.

Second, a study of the trading results and methods of operation of the speculator customers of commission houses would be useful in evaluating and improving the pricing usefulness of the market. There are many opinions about how speculators operate and fare, but little is known. If there is a large turnover of customers, the pricing usefulness is probably less than if there is a small turnover. One cannot be around markets for long without hearing innuendo about churning accounts and hustling for commissions. It would be well to know the facts. More than any other group, commission merchants must operate with special circumspection. The position of account executive is a semiprofessional one.

A third kind of study might be called a flow of funds analysis. The clearinghouse breaks even, for every long there is a short, and for every profit there is a loss, but

several kinds of traders exist. One list of kinds might be small hedgers, large hedgers, combined hedgers-speculators, scalpers, floor traders, professional speculators, large-scale speculators, and small-scale speculators. A careful study of who wins and who loses would be useful in evaluating contract terms, trading rules, and commission-house practices.

None of these comments are meant to imply that market use should be restricted in any way. It is each person's own peculiar business if he wishes to trade. Markets must remain open and competitive. Nor do these comments imply any wrongdoing or questionable practices. It is quite as important to illustrate that which is good and correct as it is to search for things that need improvement. Nor are my comments applicable to the Chicago Mercantile Exchange alone. It does seem important to me that the Mercantile take leadership in market analysis consistent with the leadership that it has taken in the development of the new concepts in futures.

CONCERN WITH GROWTH

I think that my concern with the future of futures trading is readily apparent. I trust that I have made my enthusiasms for the new developments equally apparent. It is incumbent on all of us who work in the area to promote widespread use by producers, processors, and distributors as well as to assist in the development of a large group of competent speculators.

There are three routes we can go in pricing of agricultural products in the increasingly commercial agricultural world—three routes in the search for greater price stability: first, toward government price establishment; second, toward vertical integration and dominance by a small number of large firms; and third, toward larger futures markets. I think in the third direction lies the maximum competitive efficiency and the maximum individual opportunity and freedom.

