By 1959 futures trading in grains had recovered substantially from the suspension that existed during World War II. But trading was lethargic, and there was risk that trading would decline to negligible amounts. The primary cause was the influence of governmental price-support programs. The price-support programs for cotton had so limited price variations that the New Orleans Cotton Exchange had closed. The primary force keeping the Chicago Board of Trade in business was the soybean market, which had remained relatively free of governmental influence on price.

Against this backdrop, a session of the first Agricultural Industry Forum at the University of Illinois was devoted to problems of the decreasing volume of futures trading. Officials of the Chicago Board of Trade were present and participated. The session provided an opportunity to suggest that the exchange look inward for problems other than the heavy hand of government. My recollection is that a quite vigorous discussion ensued.
CHANGES NEEDED IN FUTURES CONTRACTS

In appraising the problem of a declining level of futures markets activity, we need to cast about in all directions. My comments are limited in scope. The total of the causes cannot be ascribed to problems arising within the futures markets mechanism. I do not want to give the impression of saying that if you will do this all of your problems will be solved; they will not.

The direction of my casting about is internal. It is a matter of introspection. We are always reluctant to consider that some of the fault may be our own. For this reason, this analysis is especially valuable. It is also valuable because it is a line along which we can take action. If we find something internally wrong with futures trading, we can correct it—that is, if the delivery terms of contracts are not the best possible, we can change them. But let us face it, the government is not going to get out of the grain business because intervention is hurting futures markets.

A second point I want to make at the outset is that I speak from a biased position. The assumption on which I have based my comments is that futures markets are useful economic institutions and that a decline in the level of futures market activity is undesirable. To me this is a quite valid assumption. My critical comments are intended to be constructive.

FUNCTIONS OF FUTURES MARKETS

In the interest of finding a common ground for discussion, some review of the fundamentals of futures trading is appropriate. Futures markets are devices for separating some of the marketing functions from others so that specialization is possible. Futures markets have evolved as devices by which the functions of risk bearing, risk financing, and the pricing of commodities are separated from the functions of storing, merchandising, conditioning, processing, etc.

The process of risk shifting and risk financing is well known and understood. The pricing responsibility of futures markets is much less well known. In fact, it is usually denied. When a hedger has shifted his risks of ownership, he is no longer interested in price level, only in price relationships and the prices of individual lots

of a commodity in relation to the general level. The price level of a commodity is determined by the fundamental forces of supplies, requirements, and monetary values in the long run. But interim prices, particularly within crop seasons, are in part determined by inventory holders, by their willingness to hold or divest themselves of inventories and their reservation prices in their inventory actions. Inventory operations affect prices; speculators affect inventories, and, more important, the price levels at which inventories are carried.

In essence, futures markets are devices for facilitating specialization in risk bearing and pricing. This function is properly called speculation. A futures market is an institution designed to foster, encourage, and increase specialized commodity speculation.

The long-run level of futures market activity will be determined by

1. The need and desire of the marketing systems to shift inventory risks.
2. The effectiveness of the system in facilitating risk shifting.
3. The effectiveness of the system in maintaining specialized speculation.

To expand, or to halt the downtrend, the system must be so organized that it works to the mutual advantage of three groups of people; the risk-shifters, that is, hedgers; the facilitators, that is, brokers and scalpers; and the risk-bearers-pricers, that is, speculators.

Current declines in the level of futures activity can be traced to decreases in all three areas. Two factors are working to decrease the need and desire of inventory holders to hedge.

First, the government has taken over much of the inventory-carrying function and has tended to decrease price fluctuations by placing upper and lower limits on prices. It is easy to exaggerate both of these. In the main, the inventories that are held by government would otherwise not exist or would be held by growers. Grower inventories of grains are not usually hedged. Government activity affects hedging only to the extent that it affects stocks held by merchants and processors and by special export arrangements that reduce price risks in the exporting business. While extreme price fluctuations may have been reduced by government activities, a great deal of price variability has been generated by the caprice of government activity.

Second, the need and desire for hedging has been decreased by integration in grain marketing. As firms integrate all of the way from the country level to final consumption, they are in a position to absorb and average out price change. They become their own underwriters.
There are also potential increases in the need for risk shifting. Historically, farmers have carried most of our grain inventory risks. As farming operations become larger and a higher proportion of farm costs become variable as contrasted to fixed costs, the need to shift risks will increase. Because this is an area from which there has been so little hedging in the past, and because it is such a high proportion of the total inventory, a small increase in hedging has a big proportionate effect on the total of hedges.

The effectiveness of futures markets in facilitating risk shifting is declining. Markets are becoming less liquid. The volume of pit trading appears to be declining. Scalpers are finding it increasingly difficult to earn a living. One major cause is a decline in independent brokerage activity. The liquidity of the market has decreased as hedgers have increasingly handled and cleared their own trades.

The effectiveness of the system in maintaining specialized speculation is decreasing. Although speculation in futures contracts has not been a very profitable occupation in recent years, speculation in cash commodities has been reasonably profitable. The contrast in these two statements leads us to want to take a hard look at the futures contract itself.

**What Is Needed in a Futures Contract?**

A futures contract must permit and enable specialization in speculation. It must successfully separate the risk-bearing and pricing functions from the other grain-marketing functions so that speculators can be speculators and nothing more. It must not be a merchandising device. Delivery must be rare. And when delivery is taken, there must not be transferred to the taker of delivery any need to merchandise. At the same time, it must be a commercially real contract, representing and thus pricing actual commodities as they exist and are used in ordinary commercial activity. A non-deliverable contract, as has been suggested at times, would be fiction and would have no real relationship to the marketing of commodities. The rights and obligations of delivery must be inviolate.

Neither of the two specialists, merchant and speculator, is doing his job when delivery is made and taken. The speculator is doing part of the job of the merchant, and specialization breaks down.

How is a contract a deliverable contract and yet one on which delivery is rarely made or taken? This is a matter of balance of contract. The contract must be such a perfect balance of advantage that both parties remain in their respective spheres of specialization and do not make or take delivery.

Essentially, the balance is between merchant-storer and speculator. Merchants are short, and speculators are long. In the context of contract considerations, we
must consider the aggregate positions rather than the position opportunities of
individuals. The net of hedgers' positions is almost always short. The net of spec-
ulative positions is, therefore, necessarily long. In a broader sense than futures
trading, this is also true. There are inventories that must be owned, and whoever
owns them is speculating on the long side of the market.

If the balance of contract terms is advantageous to one side or the other, special-
ization of functions cannot exist. If this specialization does not exist, the basic
reason for futures cannot exist. If this specialization does not exist, the basic rea-
son for futures trading will not exist. An institution without a basis cannot survive.

Contracts Are out of Balance

It is my hypothesis that contracts in grain futures on the Chicago Board of Trade
are out of balance in favor of merchant-storers. We are in the process of killing
off one set of specialists—the speculators.

Only rarely in recent years have futures contract values got up to the going mar-
et market price for the grains they purport to represent. For example, on January 21,
1959, January soybeans closed at 4 1/2 cents less than the price of No. 1 yellow
soybeans to arrive from Illinois and Indiana origin points. Last summer, with corn
quite tight and stocks in Chicago negligible, No. 2 corn to arrive traded about 4
cents over the July contract until the final two or three days of trading. The March
1955 corn future expired 8 cents under the No. 2 bid to arrive price.

No. 2 corn to arrive, I.P. and T.M. billing, and No. 1 yellow soybeans, high rate, Illi-
nois and Indiana origin, are the standard commercial items of trade. If asked,
"What is the Chicago price of corn and soybeans?" one should answer in terms of
this kind of price.

We are trading in one kind of grain in our ordinary merchandising and processing
activities. Futures markets are pricing very different items. These days it takes a
very fancy squeeze indeed to force the futures price up to prevailing cash price
for ordinary commercial items.

For a speculator to buy a futures contract, he must be very bullish. Suppose that
on November 18, 1957, with the crop in store, a speculator decided that soybeans
were cheap at $2.13 bid to Illinois farmers and so bought May futures at $2.41.
By May 1, bids to farmers were up 12 cents. It would have cost a cash speculator
8 1/4 cents storage and about 4 cents interest. He would have just about broken even.
But our specialized futures market speculator lost 14 cents. His ideas about soy-
bean values were not bad. But he lost money because he started out trading in a
standard commercial item and wound up threatened with delivery of a specialized
commodity properly labeled Minnesota Out-of-Position Junk for Delivery Purpose.
Any similarity between the two was only by grace of coincidence of certain characteristics under federal grade standards.

On July 19, 1957, No. 2 oats, 36-pound test, were worth $1\frac{1}{4}$ cents more than the July future. By December 1 the same quality oats were $6\frac{7}{8}$ cents over the December price—that is, for a speculator to break even, the oats price needed to go up by the carrying charge shown in the July–December spread plus $5\frac{5}{8}$ cents, not counting commissions. As a result of this kind of thing over the past several years, the oats pit is now occupying too much floor space. The exchange would make more money by renting the space to a peddler of candy, cigarettes, and headache powders.

For the average of the past six years, to-arrive corn on the next-to-last day of trading in the December contracts was 2.75 cents over the December future; and on the next-to-last day of trading in the May contracts, it was 4.42 cents, for a net gain on the futures of 1.67 cents plus the December–May spread.

For the average of the past four years, the to-arrive price of soybeans basis Chicago went from 1.53 cents under the November on the next-to-last day to 1.06 over the May on the next-to-last day, for a gain of 2.59 cents on the futures plus the November–May spread.

For the average of the past three years, the to-arrive price of 36-pound test oats went from 3.04 cents over the July futures on the next-to-last trading day to 6.04 cents plus the July–December spread.

These net gains tend to measure the extent of disadvantage the contracts have for speculators. Speculators cannot give away sums of this size and remain in a profit position in the long run.

**ANTI-SPECULATOR BIAS**

Generally speaking, futures markets have had an anti-speculator bias for a very long time. As we look at the history of governmental action regarding futures trading, four reasons stand out:

1. The courts and Congress do not understand a contract that is not intended for consummation. It appears necessary that a legal pretense be understood that, when futures contracts are created, delivery is intended. Obviously, this is not the case if the basic function of the market is to be fulfilled.

2. In the public, producer, and congressional minds, there is a feeling that speculators are evil, preying on producers, merchants, and consumers. They were once described by a prominent person as "gamblers in human misery."

3. The Congress and the CEA have always been fascinated by manipulation and have concentrated on its prevention. The period of extreme concentration
on futures market legislation and regulation from 1920 to 1936 was one in which manipulation was associated with long-side speculative operations. In these deliberations, it appeared that hedgers were knights in shining armor who could do no wrong.

4. Because of these attitudes of government and the public toward speculators, the trade has defended futures trading from the numerous attacks on it by glorifying hedging and denying any effects of speculators on price behavior. How many times have we heard the statement, "The speculator has no effect on price because he must eventually sell that which he has bought?"

The effects of these four influences have rubbed off on the way that futures markets are operated through governmental regulations and efforts of the exchanges to avoid poking a hornet's nest.

Time does not permit elaboration of the remarkable errors of these four concepts. Suffice it to say that they cannot be based on an understanding of futures trading as a system for specialized speculation. The position of the speculator needs to be strengthened. The first step in this direction is a general one. His role in the marketing system needs to be reappraised and the onus of the popular concept of evil removed from him.

The second step is to remove the position and trading limits that apply to speculators. The case for them was never reasonably proved in the first place. There are virtually no limits on anyone who has a cash position. Obviously, there is not a balance between hedgers and speculators when one is subject to position limits and the other is not. The best defense against bear-raiding of markets is a strong speculative interest. Speculators should not be forced to fight with one hand tied behind them.

**CONTRACT CHANGES**

The position of speculators can be strengthened by changes in the terms of delivery. The futures contract, and hence the futures price, should represent top-quality commercial commodities. They should represent the best of the commercially traded commodity, in the most advantageous location, and with the best possible freight billing associated with them.

The contract should represent a top-quality product, in most instances a U.S. No. 1. It is a shocking thing when oats are screened and the screenings shipped to Chicago so that 27-pound oats can be manufactured for delivery purposes. I am not critical of the firms that do that kind of thing. I am critical of a set of rules that permits it.
The standard commercial soybean is a No. 1. Why does the futures contract specify a No. 2? At this time the futures contract represents the lowest common denominator with regard to quality. It should represent the highest quality traded in significant volume. In such instances as the CEA requirement of trading on official grades interferes with this general principle, the exchange should work vigorously for tightening grade standards.

The exchanges permit delivery of less than contract qualities at discounts. This provision was inserted in the rules to prevent manipulation and to make corners more difficult. It is not necessary. In the first place, a corner is a pretty rugged proposition. Secondly, the world's largest grain merchant, the CCC, has an abundance of grain of all qualities available at a price. A contract should mean what it says. If it calls for No. 2 corn, it should mean precisely that.

If this suggestion that the contract should mean what it says is too much of a step to take all at once, then I suggest that the discounts be made punitive. If the normal market discount of No. 3 corn is 2 cents under No. 2, the delivery discount should be at least 6 cents. The legal principle of multiple damages is an old one. It should be applied here.

Delivery grain is very apt to be out of position. It is more apt to be in a high-tariff house than a low-tariff house. It is well and good for a house to set its own storage rates, but grain should be put on delivery at the lowest tariff existing in the market. The same principle should be applied to insurance. Instead of the current dollar limit, the limit should be approximately that of the lowest rate house. Here again the principle of the highest common denominator, rather than the lowest, should be applied.

One of the key problems in the extraordinary gain of cash corn on futures is the high cost of moving corn across town. Perhaps delivery corn should have a prepaid weighing and inspection and loading-out charge attached. This, plus a reduction in the very high cross-town switch rate, would make delivery corn contributory cargo and materially strengthen its price in relation to to-arrive corn.

The freight attached to delivery grain is a major factor in its value. The simple solution to this problem is to put all freight schedules on a ton-mile basis. It is not unlikely that freight rates are headed in that general direction. But in the meantime little can be done to improve the billing conditions of delivery grain.

In looking at freight structure, one is at a loss to understand why it costs more to move soybeans east out of Chicago than to move corn or wheat. The delivery situation in soybeans would probably be improved by a cheaper eastern rate.

The great white hope of Chicago as a delivery point is the establishment of an export rate. Such a rate would greatly increase the amount of grain that is price con-
tributary to Chicago. At one time Chicago was the grain crossroads of the world. It no longer is. An export rate would restore this situation.

**Effects on Hedgers**

That the various things suggested here are designed to strengthen the position of speculators does not mean that they are disadvantageous to hedgers. They are designed to make contracts more concisely representative of commodities trades.

They would also aid hedgers. In the first place, a market without healthy speculators is not an effective hedging medium. It is unwise to kill a goose that lays golden eggs.

In the second place, a futures market that is not representative of commercial values has an erratic basis. So long as the basis is consistently erratic in favor of hedgers, they benefit until they exhaust the existing supply of speculators. But it does not always occur that way. Years are encountered, as 1958, when most of the oats are high in test weight and the net gain of cash on futures is not obtained.

Last year we learned the basis effects of large Chicago stocks of soybeans. Until this time this crop year, the basis gain downstate soybeans has been very large. But this fancy basis may not last. The deliverable supplies this year are high-quality, Illinois origin. A brisk demand out of Chicago would break the downstate basis. In this situation a short hedge in Chicago futures is a precarious thing not conducive to sound sleeping.

The essential point is that a basis that involves something more than the going market price of storage is a capricious one and therefore not a good hedging one. We have reached the point of speculating in basis out-of-delivery considerations. It is not healthy; it can be stopped by tightening up delivery terms.

Finally, I want to make it clear that the primary basis of my concern is not the need to improve the hedgeability of the market. I rather think that, of the two major functions of futures markets, risk bearing and pricing, pricing is the more important. Risks exist and they will be assumed. The cost of getting risk carried is greater outside of a futures market complex than in it.

But the greater loss from a decrease in futures trading is in pricing. Commodity prices are speculative. The accuracy of pricing and the stability of prices is improved with a high-quality job of speculation. The quality of speculation is markedly improved by specializing in speculation.

With specialized speculation there is a much greater degree of competition in pricing than would otherwise exist. Protection of this competition is of primary concern in the storage, processing, and merchandising of grain.