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AUTHOR'S NOTE

The next month, February 1976, it was back to a study committee to address the question of designation of delivery points. It was an important political issue in the act that established the CFTC. The thrust of my comments was in the direction of protection of the longs; however, after extensive study of the issue, little, if any, intervention would occur.

DESIGNATION OF DELIVERY POINTS

If the CFTC finds that the delivery terms for a commodity are inadequate to prevent or diminish price manipulation, market congestion, or abnormal movement, it is empowered to change delivery terms, particularly by designating additional delivery points. This charge of the Congress to the Commission has a ring to it that troubles me. There is an implication that there is currently a need for changes in designation of delivery points. The implication is not true; it cannot be, for markets that have the wrong delivery terms disappear.

The implication of the law is that there is congestion that causes upward price distortion. There is another side to the coin. It is possible for delivery to be so restrictive that there is congestion, but it is also possible for delivery to be loosened up to the point that markets are damaged and go out of existence. It appears to me that over the years, the pressure put on exchanges to avoid congestion has resulted in weaker than optimal delivery terms. I think that the mill feeds futures market at Kansas City and the turkey futures market at Chicago died because of too easy delivery. It is important that at least as much attention be paid to seeing that delivery terms are sufficiently restrictive as to seeing that they are loose enough to avoid congestion.

The power of the commission must be exercised with great care. There is in it danger of the destruction of markets. Futures markets are fragile things; many are started and fail, many more fail to grow to viable size, and even the best are small in comparison to the jobs that need to be done. I have said many times that instead of being impressed with an open interest of 400 million bushels of corn, the market should aim for four billion. One basic principal is that if a market works, leave it alone.

One of the most difficult tasks in starting and operating a futures market is establishing the terms for delivery. A futures contract is a temporary substitute for an eventual cash transaction. In markets that work, delivery is rarely made and taken; futures contracts are entered into for reasons other than exchange of title. Markets where there is a large amount of delivery fail and go out of existence

CHAPTER 37

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because extensive delivery is an indication of an out-of-balance contract, one that favors either the longs or the shorts. When a contract is out of balance, the disadvantaged side ceases trading, and the contract disappears.

The objective in writing a futures contract is to obtain such even balance that only an amount to test the price is delivered, to make the contract so readily deliverable and receivable that there is no incentive to make or take delivery. The terms of the contract must be precisely representative of the commercial trading practices of the commodity. When contracts are written, their terms are as closely descriptive of existing practices as a committee of knowledgeable people can make them. The commercial circumstances surrounding a commodity change as the production, marketing, processing, and consumption change. The delivery terms appropriate at one time are not appropriate at another, so that changes, sometimes frequent ones, are necessary.

There are several terms of futures contracts: commodity, amounts, price, quality, place of delivery, time of delivery, terms of payment, and provision for default. All of these, except price, are standardized. The terms are simple to write except quality and place of delivery. Both have been the source of continuous problems for exchanges, but quality issues have remained out of the public sector.

For the first century of futures trading, deliveries were almost entirely at the central markets where the futures markets are located. Nearly all trade was in raw agricultural commodities, and a large proportion of each moved to central markets for storage and processing and then into distributive channels. The amounts that flowed naturally to and stored at central markets were large enough to be fully representative of value and to prevent congestion in delivery months. Following World War II, the marketing system was decentralized as the result of numerous changes in the commerce of commodities. A high proportion of wheat now moves from areas of production to export points. Livestock slaughter moved from central markets, as Chicago, to the interior. Trading in new commodities developed, and many of these have never moved through central markets. The soybeanprocessing industry developed in the interior near points of production, and oil and meal moved from the dispersed processing plants to equally dispersed points for further processing. It was thus necessary to designate multiple delivery points at interior locations. The questions continually at issue are not single versus multiple delivery points, but are of how many points at what locations.

Commodity exchanges are great democratic institutions, and they make changes slowly. It is a clumsy matter to change delivery terms. It takes a lot of committee work and consultation with all affected parties. Contracts for which trading has started must be continued with the old terms until they expire. It either takes a year to implement a change, or there is overlapping so that there is trading in, say,

"Old March Wheat" and "New March Wheat." Exchanges have had a record of changing slowly, sometimes too late. Trading in rye futures expired. One reason, doubtless, was the failure to recognize that Chicago was no longer a viable delivery point. Trading in oats futures nearly stopped before Minneapolis was made an alternate delivery point.

It is easy to be overly critical of exchanges. The establishment of delivery terms is often quite difficult. The soybean meal futures contract has been a problem since the beginning of trading in 1951. The delivery terms have been changed many times. There is a new contract starting with the March 1976 delivery. How well it will work is uncertain, but we must give the committee involved excellent marks for effort. The Chicago Board of Trade, in response to criticism of the existing wheat contract, launched a thoroughly researched and carefully designed Gulf wheat contract in 1974. It failed to trade. A lot of work, information, and wisdom of experienced people goes into the development of contracts. The motivation is to make the contract work. The record shows that it is an involved and difficult process.

Delivery on futures contracts is a sampling of value process. The objective is to take a sample from the flow stream of the commodity, test it for value, and return the sample to the stream. There must be a sufficient amount of the commodity to move to and through the delivery points to provide a representative sample. Note that I stress movement to and through rather than stock at the delivery point. The great apprehension about starting futures trading in perishables such as live cattle was the lack of a deliverable supply. But the sampling of the flow stream principle has worked quite well. The amount of flow and stock must be large enough that the price is representative of the value of the commodity generally, so that the relationships with other points of commerce are rational. These are minimum requirements, and the minimums should be maximums. The delivery process must be kept as simple as possible. Speculators will not participate in markets in which delivery is complex, and great merchandising skill is required to know what market value is and to dispose of the commodity received on delivery.

Speculators are the most scarce and precious resource in making markets work. When delivery terms are disadvantageous to them, they have a simple solution: they simply go away and trade something else. No speculator is tied to corn when there is a pork belly market. But a corn producer or corn merchant is tied to corn, and he has to have speculators present.

A strong case can be made that the terms of futures contracts should lean in favor of speculators. Delivery terms should be a premium item in terms of quality and location, a No. 1 quality grade instead of fair, or average, quality. The top of the line is easier to identify and relate to than are other qualities and locations. If it is nec-

essary to broaden the delivery base to prevent congestion, it should be done on a moderately punitive basis. If the normal Toledo corn price difference is 4 cents under Chicago, the Toledo discount should be 8 cents, etc. The delivery location should be a strong location from the taker's point of view.

Proliferation of delivery points results in distortion of price relationships over space. Delivery is made at the point of lowest value, and cash prices at other points are above this by commercial value differences. Delivery goes to the least common denominator, and the identity of the least common denominator is continually changing. When delivery hops from point to point, cash-to-futures price differences at all other locations become erratic. This makes hedging difficult, if not impossible. There is not only danger of losing the speculators but of losing the hedgers as well. Primary producers and interior merchants have a tendency to want delivery points close to their operations so they can make delivery when they cannot readily merchandise the commodity. It is a simplistic notion that has appeal: delivery at the entry point to the marketing system. However, on more careful consideration, such a system would be disadvantageous to the hedgers because of the erratic basis behavior. It would be useful to the least common denominator only when it was his turn to be the least common denominator.

An incident in the corn market in July 1973 was of major influence in getting attention focused on the delivery point question and inclusion of the delivery point legislation into law—exports of all grains were extremely large that summer. Movement of wheat to the Gulf tied up rail cars so that movement of corn among interior points and to the Gulf for export was difficult and limited. Where there was transportation to move it, corn was valuable; and where there was not transportation, the price was unusually low in relation to other markets. In early July, the cash price at interior Iowa points was unusually low relative to Chicago. The interior Illinois points price was above Chicago, rather than a usual 10-cent discount. And the Gulf price was much higher than usual in relation to Chicago. The cash price at Chicago was above the futures. It was an abnormal spatial price structure caused by a huge export movement and limited transportation. The price of July futures rose from \$2.33 on July 12 to \$2.49 1/2 on the 17th, and \$2.59 1/2 bid on July 19. Trading limits were removed, and the price spiked up to close at \$3.70 to \$3.90 on July 20, which was the last day. It appears that the primary shorts were interior hedgers west of the Mississippi, and the primary longs were exporters who were counting on corn from Chicago for Great Lakes shipment. Until the last day of trading, the July futures price lagged under the cash prices at Chicago, interior Illinois and Indiana, southeastern United States, and Gulf prices. Cash prices continued strong, and relationships distorted following the expiration of the July futures.

The interior hedgers not only went into the delivery month without foreseeable means of making delivery, but they stayed until the end. The abnormality was basically caused by transportation problems rather than inadequacy of delivery points. More immediately, the abnormality was caused by imprudent and poor hedging technique. Had interior Iowa and Minnesota points been deliverable, the futures price would have gone to the Iowa level and all of the other points would have gone to huge premiums over the future. The spatial disequilibrium would not have been corrected. That which would have been a good deal for some hedgers would have created a very difficult situation for others. Most important, the predictability of basis would have been reduced, hence, the usability of the market by hedgers.

It is easy to look at the corn incident and become more concerned than justified. The July futures price spiked up to a very high price in one day. Other futures prices were not affected; there was not congestion in the September delivery. It expired quietly and weak relative to the December. The cash price was not affected. It appears that price relationships over space were not affected.

What this really raises is a question about the extent to which market participants should be protected from themselves. I suspect that part of the reason that the hedgers stayed imprudently short for so long was that they had confidence that there would be sufficient pressure brought on the longs to prevent a sharp run-up. Perhaps it would not have happened had there been a less regulated atmosphere.

So much for the general guidelines. The problem of the Commission at this time is to develop a system of monitoring delivery terms to comply with the charge of the Congress. How can inadequate delivery terms be identified? (Note that I have broadened the question to include the totality of delivery terms other than just delivery points. It is not possible to look at just one part.) The problem is one of identification of a distorted price or set of price relationships.

Identification of a truly distorted cash price that is the result of a market corner is easy and should not be a part of the delivery point question, but a part of a manipulation investigation.

A substantial research effort is needed for the monitoring of the effectiveness of delivery terms and needs to be developed. It is an ongoing process that is a permanent part of the activity of the Commission. The problem is conceptually simple but quite difficult to implement. The procedure is to establish normal price differences over space on the basis of historical differences, then measure deviations from normal that are the result of changes in commercial forces affecting locational differences, and finally relate remaining unexplained differences to the situation in the futures market.

The development of normal differences is not easy because data are not readily available nor notably accurate. There are secular changes over time that need to be taken into account in developing normal differences. Accounting for deviations from normal that are the result of commercial forces is complex. There is a concept of a spatial equilibrium that will result in just the right flow of a commodity from the many points of origin to the many points of consumption. But for any given time the spatial equilibrium is uncertain. Differences approach equilibrium but never achieve it. They are constantly in motion. Sorting out the differences that are "proper" because of commercial forces from those that are "improper" because of activities in futures is difficult.

Some effective work can be done on narrow ground relating to futures markets. These relate to the size and composition of the open interest, particularly near the expiration of trading in a given month and in months near the end of the crop years. They relate to the degree of price volatility near the expiration of trading. Finally, they relate to the amount of delivery made and taken.

As a final comment, I would caution that at least as much, if not more, attention should be paid to the possibility of excessive short positions and excessive delivery as the possibility of long-side congestion. I suspect that more damage has been done to markets by too easy rather than too difficult delivery.

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