

Part II

THE ECONOMICS OF FUTURES TRADING

In Part I we discussed what futures markets are. The next subject is what futures markets are about. Claims and counter-claims about their utility and disutility in the economic processes have been made throughout their history. Two facts are extant; they are a major activity, having to do with the use and transfer of large sums of money and they have persisted and grown for a long time in a competitive economic, and a generally negative, social-political world. From these it can well be argued that they are productive else they would not have lasted; that a competitive economic system tests activities and keeps those that add to total product while rejecting those that do not. The argument may or may not be valid. At some point it becomes desirable to do some evaluation but first we should examine the relationships of the activity to the world (one is tempted to say *real* world) of commodity production, trading, and use.

Futures markets are about several things and they are about different things to different people. This is somewhat analogous to the old story of the four blind men who felt different parts of an elephant—trunk, tusk, leg, and tail—and reached quite different conclusions about the nature of the beast. To merchants the markets are about price differences, to speculators they are about price changes and gains and losses,

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to producers they are about revenue guarantee and credit availability, to government agencies they are about price aberrations and security of customer funds, and to commission futures merchants they are about volume of trading. Economists try to put the elephant together by making lists of the functions of futures markets.

Each of us must make his own list—it is the nature of economists to reshuffle each other's list, looking for something to criticize in other economists' work while attempting to achieve distinction. The list of things that futures markets are about offered here is: 1) competitive markets, 2) risk shifting, 3) equity financing, and 4) speculation. No order of importance is suggested; the several things are an interlocking package.

CHAPTER 4

Historical Development

Futures markets were not invented and imposed on the existing marketing system but evolved out of the need for the performance of marketing functions that the then existing marketing system was not doing adequately. They did not start as a separate or alternative way of doing business but as an extension and refinement of existing practices. They have been in a continuous state of change, development, and refinement throughout their history. The focus of futures trading has changed as the commercial setting has changed. The commercial setting has changed rapidly in recent decades and will likely change at a greater speed in the decades ahead.

A look at the evolutionary process is useful in identifying the functions performed, determining what futures trading is about, and in forming opinions about changes in the system that need be made to adjust to changes to come. Perhaps more to the point, putting futures trading into historical perspective is helpful in making effective use of the markets. That is, knowing how we got here is useful in understanding the present situation which is essential to making profits rather than sustaining losses.

The roots of futures trading are as deep as commerce itself. Nearly all authors find it impossible to resist going back into ancient history to find the beginning.¹ The concept of futurity in contractual arrangements is as old as commerce. The rules of futures trading certainly date back to the medieval fairs of France and England which were large and complex by the 12th century. Time dealings in the products of whole fisheries existed in Holland in the early

¹ See especially Emery, Henry Crosby, *Speculation on the Stock and Produce Exchanges of the United States*, Studies in History, Economics and Public Law, Vol. VII, No. 2, Columbia University, 1896; Bakken, Henry, *Theory of Markets and Marketing*, Mimir, Madison, Wis., 1952; and Baer & Saxon, *Commodity Exchanges and Futures Markets and Trading*, Harper, N.Y., 1948.

1600's. There was a famous speculative bubble in Dutch tulips in 1634–37 that has been repeatedly used in illustrating the ridiculousness and evil of rampant commodity speculation. One favorite point of beginning is in the trade in warrants, particularly in pig iron in England, in the early 18th century. There are accounts of highly developed trading systems in Japan in the early 1600's.

All of this is interesting and is especially useful in developing concepts of competitive markets but as a practical matter we need look no farther back than the frontier of the U.S. in the mid-19th century for the origin of modern commodity futures trading. The essential ingredients of mercantile law, warrants for interchangeable units, futurity of contracts, and price speculation were already developed and present in U.S. commerce. The circumstances of the frontier, particularly in the grain trade, were the catalyzing agent out of which futures trading grew. Emery² put it thus, "Untrammelled by business traditions of past centuries, or by the tendency to fit new conditions to old methods, the trade of this country has unconsciously adopted new and direct means for attaining its ends. There has been little 'history' or 'evolution' about the process, for the practical mind of the business man has simply seized the most direct method of 'facilitating' business, a course forced on him by the constantly increasing size of his transactions."

The history of modern commodity futures trading is closely associated with the development of the commerce of the city of Chicago. In 1833, Chicago was incorporated as a village, having grown up adjacent to Fort Dearborn. It grew rapidly and became a city in 1837 with a population of 4,107. The strategic location of Chicago at the lower terminus of the Great Lakes and close to the fertile lands of northern Illinois resulted in rapid growth. The opening of the midwest was dependent upon water transportation; the land was fertile but muddy and nonwater transportation was limited to oxcart and horse.

The grain requirements of Chicago were produced nearby. As farmers spread over the fertile plains, market outlets became difficult to obtain and did not exist at all at the perimeters. Similarly, as Chicago requirements increased, the procurement of supplies became a problem. Transportation was expensive and its development received high priority. In the 1840's it cost about the full value of wheat to haul it sixty miles by oxcart. Corn was less valuable so that its point of origin price reached zero at a lesser distance. Plank roads were laid for substantial distances on the approaches to the city. After more than a decade of financial difficulty the Illinois-Michigan canal was opened in 1848. Railroads quickly radiated in all directions.

Chicago, the lake terminus, tapped the heartland of this opening agricultural area. It began early to supply commodities to the more populous east and for export. As early as 1832 export shipments of beef and pork were made. In 1839

² Op. cit. p. 37 Emery, H. C., *Speculation on the Stock and Produce Exchanges of the United States*, Studies in History, Economics, and Public Law. Vol. VII No. 2, Columbia, 1896.

arrangements were made to ship 1678 bushels of wheat by boat to Black Rock, N.Y.

The rapid development of Chicago as a grain terminal took place following the opening of the Canal. By the time of the Crimean War in the 1850's, Chicago, with its rich outlying agriculture area, was in an excellent position to supply the disrupted world grain trade. During the Civil War Chicago served as the chief grain concentration point of the Union armies.

With a rapidly expanding population and eastbound commerce, processing facilities developed. Thus, there were three principal demands for grain at Chicago: reshipment east, processing, and to support the livestock population of the city itself. This latter was of large size, consisting of horses, pigs, chickens, and cows including, finally, the notorious one belonging to Mrs. O'Leary.

The Board of Trade of the City of Chicago was organized in 1848 with 82 members. Its primary objective was to promote the commerce of the city. One of its most notable early accomplishments was the development of a system of standards for wheat and the starting of a system of inspection and weighing grain. In 1859 The Board of Trade was authorized by the State of Illinois to hire and instruct personnel to measure, gauge, weigh, and inspect grain.

The development of quality standards and an inspection process and the substitution of weighing for the measurement of grain greatly facilitated trade. The substitution of weight for volume measures made the development of advanced grain handling machinery possible. Increase in physical efficiency was important in the development of Chicago as a great grain terminal market. The fungibility of grain resulted in increased physical efficiency in handling and enabled the issuance of warehouse receipts. These documents of ownership were useful in exchange of title and as collateral in financing trade.

The making of grain fungible was a key step in the development of impersonal, transferable contracts that eventually became futures contracts.

As traffic in grain increased rapidly following the opening of the Canal, problems of spot exchange increased. Trading in commodities at Chicago followed the old world custom of public trading, taking place in squares and on street curbs. Grain trading moved about from curb to curb with merchants often meeting in several places in one day. Such confusion finally became intolerable and a convenient meeting place was provided by The Board of Trade. Facilities for the display of grain were provided and regular hours of trading were prescribed.

Corn and Wheat

To fix a precise time for the beginning of futures trading requires a tighter distinction between forward contracts and futures contracts than can be made. The most likely story has to do with the corn trade.

As soon as the Illinois-Michigan canal opened, a brisk trade in grain developed along the river. Farmers produced grain close to the river and hauled it to local elevators by oxcart and sleds. Merchants built corn cribs for subsequent shipment to Chicago. Farmers hauled corn in during the late fall and winter when the roads were frozen and passable. The merchants held it until it reached a low enough moisture to ship safely and the river and canal were free of ice. This practice of holding corn necessitated building up substantial inventories.

Merchants generally extended their capital resources as far as possible in building facilities and farmers wanted payment as soon as the grain was delivered. There was a great deal of price risk involved in holding corn from fall and winter to spring so that bankers were reluctant to make large loans on unsold grain. As a result the river merchants quickly developed the practice of going to Chicago and making contracts, at firm prices, for the delivery of grain in the spring.

These were time, or forward, contracts calling for delivery of a standard quality at an agreed price and substantially deferred delivery. The length of time until delivery set the time contracts apart from "to arrive" contracts which usually called for immediate delivery. The first time contract on record was made on March 13, 1851.³ It called for delivery of 3000 bushels of corn in June at a price one cent per bushel under the March 13 price.

In some instances the Chicago merchants advanced funds with which to pay farmers, and in others, bankers judged the firm contracts desirable collateral and made loans. Merchants were able to bid more rationally for farmers' grain when they held firm sales contracts. This doubtless worked to the advantage of farmers. The forward contracts materially lessened the pricing and financing problems of the river merchants.

The time contracts business developed rapidly and became a usual practice. The Crimean War and subsequently the Civil War resulted in sharply fluctuating prices. Chicago merchants were reluctant to bid vigorously for deferred delivery. They tended to keep the forward bids below prices that they thought would prevail at the time of delivery because of the danger of a price decline. There were other, more venturesome people who would bid up to or above current prices. Many of these were not connected with the grain trade; they were merchants in other lines, land speculators, lawyers, physicians, and the like. With a mental picture of Chicago in the 1850's in mind, we can readily visualize the scene. A country merchant rides into town in January and proceeds to the place of business of the terminal merchant to whom he regularly sells. On offering 20,000 bushels for June delivery at the current price he hears, "I would like to bid that much but with the large stocks in Chicago and a large crop coming in I can only pay 15 cents below today's price." Our friend mentions the high price that he has already paid farmers, comments on the ancestry

³ Irwin, H. S., *Evolution of Futures Trading*, Mimir, Madison, Wis., 1954.

of terminal grain merchants in general, and takes himself to the nearest saloon to find solace. There he comments to all and sundry regarding the greed and cowardice of grain merchants in general and one in particular. On hearing this one stalwart soul says, "I know nothing of corn, being a builder of houses myself, but it occurs to me that the price of corn will be quite as high in June as it is now." Being true to his occupation, just as we know country merchants today, our man asks, "Is that a firm offer?" "I shouldn't want to go quite that far but I will bid five cents below today's price. That will take you off of the hook and out of your cups and leave room for a bit of a profit for me." "Done," replies the country merchant and they sign a contract. Some weeks later the builder of houses, who has now become interested in these matters, notes that the price of corn for June delivery is five cents above the price that he has paid. He figures that \$1000 in his pocket is better than 20,000 bushels of corn in his lap in June so he peddles his contract to the nearest terminal merchant and wonders why he had not discovered this easy road to riches sooner.

Others made the great discovery. By the mid 1850's contracts frequently changed hands several times before coming to rest with a merchant who was seriously interested in receiving the corn in question. The speed with which trading in forward contracts grew is not known. It appears that the increased grain trade during the Civil War and the fluctuating prices of that period stimulated activity so that trading in time contracts received major attention by 1863.

Forward contracts, as distinctly different from "to arrive" contracts, in wheat made their appearance slightly later than those in corn. Some notice of time contracts in wheat was taken in the newspapers of 1852. The problems of wheat accumulation were different than corn because wheat could move to Chicago readily at harvest. Before the spread of the railroads it was teamed in while the roads were in good condition. Because it was higher in value than corn it could be hauled greater distances. Thus, the interior buyers of wheat did not have the same risk and financial problems.

Wheat accumulated rapidly at Chicago during and after harvest. Substantial stocks were built up and moved out gradually to satisfy local milling requirements, the export market, and eastern millers. These stocks were owned by eastern export and milling interests, Chicago merchants, and, in a small amount, by country shippers. In the case of corn, Chicago merchants were the original buyers of forward contracts but they became sellers of wheat forward contracts. They were the ones who had the problem of price risk and financing. They sold forward to eastern millers and exporters.

Millers and exporters also had price risk and financing problems. During the 1850's and 60's prices were erratic. There was a rapid increase in production and shipment so that there were frequent market gluts and price declines. As the eastern interests saw large stocks build up at Chicago they were reluctant

buyers except at sharply discounted prices. The Chicago merchants found non-grain interests to buy forward contracts. Doubtless, O'Learys' saloon did a thriving business.

Forward contracts were originally made between country merchants and terminal receivers with the parties intending to make and take delivery. They involved an eventual change of title to grain. When our builder of houses entered, this changed; he did not intend to take or make delivery and as the forward contracts changed hands numerous times, a relatively small proportion of the participants intended to fulfill the contracts. This use of contracts for purposes other than exchange of title is one of the key differences between forward and futures contracts.

The first cognizance the Chicago Board of Trade took of the developing trade in time contracts was in a rule adopted March 27, 1863. It provided for the suspension of the privileges of membership of any person who failed to comply with the terms of contracts that he made. It seems that when time for settlement arrived some of the contracting parties were difficult to locate. The rule applied only to the contracts made on the exchange. An earlier rule (1858) had been adopted restricting trade to members of the Board. There was doubtless extensive time contracting outside of the Board and its members.

The 1863 rule apparently did not solve the problem of contract settlement. In May, 1865 the first rule dealing specifically with time contracts was adopted. It provided for the deposit of a margin, not to exceed 10 percent of the value of the commodity, when demanded by either party.

The General Rules of the Board of Trade were adopted Oct. 13, 1865 and the margin rule was included in them. Rules relating to time contracts set forth the procedure to be followed in event of failure to deliver, provided for standardization of delivery procedures, and prescribed terms of payment.

By this time all of the essential elements of futures trading were present: contracts made for purposes other than exchange of title (although not clearly recognized), deposit of funds to guarantee performance, restriction of trade to members, and standardized contract terms. We could date the origin of modern commodity futures trading as October 13, 1865 if it is, indeed, desirable to attach a single date to what was actually an evolutionary process.

The initial rules of 1865 were followed by others as the Board gradually extended its control over trading in time contracts. The process of the extension of control was gradual and it appears that rules were adopted in response to disputes that arose. The Board took little initiative or leadership in the development of futures trading. There was resistance on the part of grain handlers to the increasing use of time contracts. Further, it was totally new territory in terms of a market so that the anticipation of problems was difficult. Trading rules were fairly complete, there was a substantial volume of trading, and merchants used futures to hedge inventories to earn carrying charges by 1875.

Cotton

The development of futures trading in cotton occurred at about the same time as that in corn and wheat although there is no evidence indicating that either was affected by the other. On the contrary, the evidence is that they evolved separately out of comparable circumstances.

The cotton trade in the U.S. was closely connected with that of England for a long period of time prior to the Civil War. Development of futures trading in the two countries was parallel. Time contracts were reported in New York in 1851, about 20 years prior to the organization of the New York Cotton Exchange. Time contracts were mentioned in Liverpool in 1857 and their volume increased rapidly during the Civil War. Cox⁴ made reference to professional speculation in cotton in Liverpool early in the 18th century. Contracts for forward delivery of cotton were traded from one buyer to another, probably passing through several hands before the time of actual delivery. They were not made to cover specific shipments but were filled from any cotton available.

The rules of the New York Cotton Exchange written in 1872 indicate that there was organized trading in futures at that time. It appears to have developed immediately after the organization of the Exchange in 1870. Rules were based on existing forward contracting practices. They provided for a standardized contract, margin deposit, transfer of contracts, described deliverable grades, delivery procedure, and payment. In addition, the rules governed the trading practices of brokers.

Trading in cotton futures at Liverpool developed slower than in New York, taking about a decade after 1871. Members of the two markets did business so that there was full knowledge on both sides of the nature of trading. Liverpool probably developed slower because it was a more important spot market and because it was bound by long standing custom. The New Orleans Cotton Exchange was organized in 1871 but trading in time contracts was not important until ten years later.

Forward contracts in cotton developed out of the financial arrangements between principal New York exporters and English importers on the one hand and between the same exporters and interior cotton merchants on the other. The interior merchants guaranteed the credit of producers at local banks. As the producers agreed to sell their cotton to the merchants, the merchants, in turn assured the banks of loan repayment. To protect themselves against a fall in the price of cotton during the season, they made time contracts with the New York and, later, the New Orleans merchants. The terminal merchants were then in a position to offer cotton for export at firm prices. The export price of cotton was effectively established prior to the start of the planting season. The

⁴ Cox, A. B. "Evolution of Cotton Marketing," Mimeo, B.A.E., USDA, 1925.

interior merchants dominated the outlets and the credit system to such an extent that they were able to relate the purchase price to their original sales prices.

Eggs

Futures trading in eggs had a peculiarly long evolutionary history, extending from about 1880 to 1919. The development of forward contracting in eggs was the result of the seasonality of egg production.

The production of eggs following the Civil War was decentralized and quite inefficient. Most farms had small flocks to provide for the household. The surplus eggs were generally sold at the local general stores. The farm flock was the basis of the farmer's wife's liberty. She set the hens, raised the chickens, slaughtered the males, and kept the pullets to lay eggs. She traded the eggs for food and typically came away with some money, "egg money," which she secreted away. It was a 100 percent profit operation. Such feed as the chickens couldn't scrounge in the barnyard, she pilfered from her husband's corn crib.

Production of surplus eggs was highly seasonal. In the spring the hens became amorous, the feed improved, and the lay increased. As hot weather arrived, lethargy set in and by winter, production fell to only the family's needs.

The storekeepers handled the eggs to accommodate their farm customers and paid little attention to quality. Most of the stores that bought eggs were within moderate distance of Chicago and could ship to commission merchants there. Some of the larger volume buyers developed connections in eastern markets. As the volume of production and shipment grew, a system of interior egg packers and shippers developed. They bought from the larger volume producers and the general stores and shipped to Chicago and to the eastern markets. Some of the eggs shipped to Chicago were forwarded east.

The demand for eggs in the cities was fairly uniform throughout the year leading to a need to accumulate during the flush production season for winter consumption. Eggs are perishable, particularly during hot weather. Various attempts were made to preserve eggs. Some were packed in salt and some in lime but the largest quantities were kept in various pickling solutions. A pickled egg is vastly inferior to a fresh egg but is better than no egg at all. The pickling business suffered a blow when ice houses were built. The first ice house was probably erected about 1868. Irwin⁵ lists egg quotations Dec. 30, 1878 as Fresh, 20¢; Icehouse, 14–18¢; and pickled, 5–12¢. By the 1880's icehouses were numerous in Chicago and large storage stocks were built up. It was not until the 1960's that the seasonal variation in egg production was essentially eliminated by changed technology.

The seasonal accumulation and liquidation of inventories resulted, not only in physical problems of storage and grading, but in financing, risk assumption,

⁵ *Ibid.*, p. 19 (Irwin).

and price determination. Large sums of money were tied up in inventories and most of it had to be borrowed from banks. Decisions had to be made about how many eggs to withdraw from immediate consumption during the flush production season and how high prices would have to be to bid to obtain storage stocks. Later in the year decisions related to how rapidly to move eggs out of storage and the prices at which refrigerator eggs could be sold. If prices were bid too high during the flush period of production the resultant storage stocks could not be sold later at prices high enough to show a profit over storage costs. But if the prices were not bid up enough the dealers would lose business to other dealers whose judgment was better.

During the early part of the period the principal risks related to quality deterioration. Risks of price declines were small as the eggs could be purchased at very low prices in the spring. As storage technology improved, quality risks were reduced but as business grew and competition for eggs increased, the risks associated with price change increased. Sometimes competition for eggs forced prices high enough in the spring to cause losses for the storage season.

Fluctuations in prices sometimes resulted in increased profits but the danger of losses was of more concern to dealers because a large loss could force a dealer out of business. The dealers established moderate proportions of their total working capital that they would put in inventory operations. This was often the limiting factor in the size of their operations; they could store more eggs than they had funds that they were willing to hazard.

The dealers solved the problem by selling eggs to their friends. It was something of a status symbol to own a car or two of storage eggs. The dealers were responsible for quality and the actual purchases and sales. In 1895 a trade paper said "at the present the indications are that there will be active speculation in eggs this season. There are men of moderate means outside the produce business who make a practice of investing in a car or so every year. . . . Nearly all these outside investors have friends among the produce houses who act as their agents. Not a great deal of money is required to carry a car of eggs."

The next developmental step was time contracts. These called for delivery of refrigerated eggs in the fall or early winter. The dealers accumulated storage eggs and sold contracts for delivery. Some were sold to egg distributors in the city and in the east but most were sold to the acquaintances of the egg dealers. The contracts had the additional advantage of being negotiable. There was usually an understanding that when the buyer of the contract wanted to take his profits or losses the dealer would pay the current price of contracts for deferred delivery and sell to someone else. In 1899 the Egg Reporter said, "The tendency to buy and sell futures in eggs is increasing alarmingly. A few years ago it was done to some extent by a few speculators, but this year we find many old, established firms doing it."

By 1917 the contracts were highly developed and standardized. The attitude

toward them was quite impersonal and settlement rings were formed. Oftentimes the original seller of a contract bought it back, sometimes from the person he sold it to and sometimes from a third, fourth, or fifth party. When this happened the original seller settled with each contracting party on the basis of price differences. The dealers eventually got most of their own contracts back and merchandised their own eggs. A substantial amount of difficulty was encountered in locating the losers when prices fluctuated sharply.

The Chicago Produce Exchange was organized in 1874 and was composed of dealers in produce of various kinds. In 1895 the Produce Exchange Butter and Egg Board was organized as a group within the Chicago Produce Exchange. A short time later a butter versus oleomargarine dissension developed and in 1898 the butter and egg dealers withdrew and formed the Chicago Butter and Egg Board. This was the trade association most closely related to the development of time contracts in eggs. Its primary purpose was to supply butter and egg price quotations. Prior to 1911 the Board paid little attention to time contracts and most of the trade was done at saloons frequented by egg dealers.

In 1911 the rules of The Board provided for margin deposit on contracts made between members. Trade in time contracts was the subject of much controversy within the Board with a general tone of disapproval tending to dominate. Trade in time contracts was suspended in 1918 because of the rules of the Food Control Act. Trading resumed in 1919 but there was great difficulty in getting contract fulfillment.

In 1919 a complete set of rules for futures trading was written and futures trading was added to the activities of The Butter and Egg Board. The effect was a new organization which was called The Chicago Mercantile Exchange. Futures trading in butter and eggs officially started Dec. 1, 1919.

Thus, futures trading in eggs was born on about its 40th birthday. The long delay in organization and the formalization is the more interesting when the informal trade existed in the same city as the very active futures trade in grain.

Soybeans and Soybean Products

The soybean crop developed in the U.S. immediately following World War I and achieved commercial significance about 1935. Production expanded rapidly and reached 100 million bushels at the beginning of World War II. Wartime shortage of edible fats and oils resulted in an increase to 200 million bushels; the first 300 million bushel crop was produced in 1950. Expansion continued at a rapid rate so that 1975 production was in excess of 1.5 billion bushels. This rapid expansion resulted from growth in the market for the products made from soybeans and was stimulated by various government programs for other crops: corn, wheat, and cotton in particular.

The soybean is an oilseed but its major production area and marketing proc-

esses are the same as the grains. Prior to 1960 more than 75 percent of the crop was produced in the corn belt. The same farms that produced soybeans produced corn, wheat, and oats; and soybeans were marketed through the same country elevators and terminal markets as the grains.

Soybeans are used for processing into soybean oil and soybean meal, both in the U.S. and the countries to which soybeans are exported. Soybean oil is a moderate quality edible fat used interchangeably with other fats and oils. Principal competitors of soybean oil include butter, lard, cottonseed, sunflower, groundnut, and palm oils. It goes into a much larger world of total fats and oils. The demand for all fats and oils is highly inelastic. Thus, the factors affecting soybean oil prices are complex and uncertain and prices are inherently volatile.

Some soybean meal is used for human consumption, but nearly all is used as a protein supplement in feeding poultry, hogs, and cattle. Demand for meal has increased rapidly as feeding technology has improved and the livestock population increased. Price elasticity of demand for meal appears to be less inelastic than for oil but the dynamics of demand change have made meal prices difficult to forecast. Prices are volatile and the commodity trades over wide price ranges.

Soybean futures trading was initiated at The Chicago Board of Trade and at The Chicago Open Board of Trade in the fall of 1936. The volume of trade was large (878 million bushels) in 1940–41 but wartime restrictions resulted in the suspension of trading. The postwar volume of trading was quite small until the fall of 1948.

There was a soybean meal futures market at Memphis prior to World War II but the volume of trade was small. Trading was resumed in 1946 but the volume remained small. Soybean oil was traded in New York beginning in 1946 but the volume was very small until 1950.

During World War II there were no price problems associated with the soybean industry. Prices of beans, oil, and meal were fixed by government regulation so handlers and processors were not concerned about possible gains and losses resulting from price changes.

Price ceilings were eliminated in the fall of 1946 and processors found themselves in a whole new world. Farmers were used to and preferred to sell the bulk of the crop—as much as 80 percent—at harvest. Processors had no choice but to buy. If they didn't, the beans moved out of position and became unavailable. They were thus in the position of owning soybeans that would be made into oil and meal over a period of as much as nine months and prices of oil and meal were highly uncertain. Even moderate changes in product prices could result in ruinous losses or huge profits. Their primary concern was with the potential losses that could put them out of business rather than with profits.

A large amount of capital was required to buy the soybeans and most of it

had to be borrowed. Bankers were quite aware of the volatility of soybean prices and looked askance at such dangerous loans—they would lose if a processor-customer went broke but did not stand to gain if he profited from price increases. Bankers are not notably venturesome but, had they been, this “heads I lose and tails I break even” kind of proposal would have had no appeal. The processors simply could not finance the inventories even had they been inclined to do so. Such was the general case. It should be noted that some could and did; they bought at harvest and sold products when they made them. This practice was generally quite profitable as both soybeans and products consistently rose from depressed harvest time levels.

Soybean oil was sold to refiners who were generally integrated toward the production of the final products of oil—shortening, margarine, and cooking and salad oils. They were large companies that sold branded products and soybean oil was only one of numerous raw materials they purchased. Thus variations in soybean oil prices were of much less consequence to users than to processors.

Nearly all of the meal was sold to feed manufacturers. It was combined with other ingredients in making the final product. Again, they produced a branded consumer product and operating margins between raw material cost and finished product prices were fairly wide. The consequences of meal price fluctuations were less for feed manufacturers than for soybean processors.

A practice of selling meal and oil for deferred delivery developed. Processors offered discounts to users for forward contracting and the farther forward they agreed to accept delivery the greater was the price discount. In October, 1947 the prices (monthly average) of soybean oil and meal for delivery during the various subsequent months of the crop year were:⁶

<u>Del. Period</u>	<u>Oil</u> <u>¢1 lb.</u>	<u>Meal</u> <u>\$1 ton</u>
Spot	20.50	84.00
Nov.	20.00	81.90
Dec.	19.50	80.50
Jan.	19.25	80.25
Feb.	19.00	80.25
March	18.75	80.25
April	18.25	78.65
May	18.00	78.60
June	17.75	78.50
July	17.67	78.50
Aug.	17.50	78.50
Sept.	17.37	78.50

⁶ Hieronymus, T. A. *The Economics of Risk in the Marketing of Soybeans and Soybean Products*, Unpublished Ph.D. Thesis, Univ. of Ill., 1949.

These discounts were large when expressed in terms of value per bushel of soybeans. In October, the product from a bushel of soybeans for spot delivery was \$3.66 while the same products for delivery in July, 1948 sold for \$3.30. This was a classic case of Keynesian normal backwardation. Processors bid for soybeans on the basis of prices that they could get for the products in the various forward positions.

This discounting practice had not gone on for very long when resellers entered the market. The resellers were broker-dealers who bought products from processors and sold them to users. As they bought products for deferred delivery at discounts they simply held them for a time, expecting the deferred price to rise to the spot price, which it had a tendency to do. As they accumulated more than they felt safe in carrying, they sold to users, and other resellers, and to people not connected with the soybean industry. Some of the contracts changed hands numerous times—one meal contract was found to have been endorsed 30 times.

Jobbers and dealers often overextended themselves and went broke. Some of the endorsers of contracts were difficult to locate and collect from when the contracts matured. Difficulties increased as the trade in deferred contracts broadened. The first reason was that as more people became involved, it was increasingly difficult to check the financial position of the purchaser. Second, as trade broadened the discounts decreased so that the purchase of forward contracts was no longer akin to shooting fish in a barrel. As competition among speculators increased, the profits decreased.

Trading on the Chicago Board of Trade in soybean oil futures contracts was started during the summer of 1950 and trading in soybean meal futures in 1951. Contract terms were virtual copies of existing trade practices. Trade expanded rapidly and forward contracting disappeared in a short time.

It is interesting to note that this instance of transition of forward contracting to futures trading (a) occurred nearly a century after the comparable transition in corn and (b) took several years to complete.

Speculation

These sketchy reviews of the evolution of futures trading in four commodity areas tell only a small part of the story. They serve to make the point that futures trading evolved out of risk, financing, inventory, and pricing problems of handlers and processors of cash commodities. The evolution of the process involved participation of people outside of the commodity businesses—speculators. These people, who made the system work, were not enticed in to fill a necessary role and limit their activity to the minimum level of speculation necessary. Rather, they found out about it, came flocking in, and took the play away. The first fifty years of the history of futures trading in the U.S. is the

history of feverish speculative activity, of contests among giants, and of attempts to manipulate prices. These contests resulted in the evolution of a set of competitive rules.

The sources of information for the story are limited and tedious. Further, put in the context of the defense of futures trading that so much of the literature of futures trading has been about, it is a history of futures trading that has been largely swept under the rug and regarded as a chronology of events that belong to a dead past. We shall see as we proceed, the extent to which the events truly belong to the past or are a part of the contemporary scene but some recounting is, if nothing else, interesting. The principal sources are the rules of the Chicago Board of Trade as they evolved, contemporary newspaper stories, and Taylor's⁷ three volume chronology of the Chicago Board of Trade. The bulk of this section is excerpted from Taylor. The terms "manipulation" and "corner" occur frequently. They should not be put in a modern context of definitions of the terms nor should it be concluded that markets were actually controlled as described. They were the then contemporary impressions of events as they were generally accepted. It is doubtful that Taylor fully understood the operation of the market. This is not in criticism because his was a chronology of contemporary impressions rather than an analytical work but we do want to reserve judgment of the events to a later point.

The events included here relate to the Chicago Board of Trade. It is clear that they were similar to the events of the other principal grain exchanges of Milwaukee, New York, St. Louis, Kansas City, Toledo, etc. Space does not permit description of the others nor are the records as complete, and, further, Chicago was the largest of the lot.

In 1864 the Secretary of the Chicago Board of Trade reported the most successful year in history despite a decrease in cash grain receipts. The explanation was found in a great development in speculative trade to which the officers of the Board were opposed. "It is time that speculation has been too much the order of the day, and buyers of 'long,' 'short,' and 'spot' have passed through all gradations of fortune, from the lower to the higher round, and in many instances have returned to the starting point, if not a step lower, but it is to be hoped that with the return to peace this fever of speculation will abate, and trade will be conducted on a more thoroughly legitimate basis."

Regarding 1866 Taylor said "In July there was a 'corner' in No. 1 spring wheat and the price went to \$1.91. News of great Prussian victories, which meant a speedy end to the war, forced prices down again. Wheat was quoted June 7, at \$1.66 $\frac{1}{2}$, and rose irregularly through the month. By July 9th it had reached the high point, \$1.91, and on the 12th it fell to \$1.65, and to \$1.43 by the 17th. This corner created much adverse newspaper criticism and many

⁷ Taylor, Charles H., *History of the Board of Trade of the City of Chicago*, Robert O. Law Company, Chicago, 1917.

charges and countercharges among members of The Board. It was charged that warehousemen aided the corner by false representations concerning the amount and quality of grain in store and fraudulent receipts."

In 1867 an Illinois Elevator bill was passed. Section 17 provided, "All contracts for the sale of grain for future delivery, except in cases where the seller is the owner or agent of the owner of such grain at the time of making of the contract and in actual possession thereof, are hereby declared void and gambling contracts, and all money paid in settlement of differences of any such contracts may be recovered back in the same manner as other money lost in gambling." and Section 18, "All parties to such gambling contracts shall be guilty of a misdemeanor. . . ." On Aug. 10, 1867 arrests were made of nine prominent members of the exchange but the cases never came to trial. The law was later found constitutional but was unenforced by common consent and at the next session of the legislature, sections 17 and 18 were repealed.

An historian, Andreas, called 1868 the year of the corners saying, "There was a corner a month, three on wheat, two on corn, one on oats, one attempted on rye, and the year threatened to go out with a tremendous one on pork products. The corner in No. 2 spring wheat, which succeeded in June, started at \$1.77 and culminated June 30 at \$2.20. The price in New York at the time was \$2.02, and the day after the corner the Chicago price fell to \$1.80, and the second of July to \$1.75. This corner created much discussion as to restrictive rules, and the agitation was brought to a head by a corner in September corn." The President of The Board, Robbins, was caught short and was unable to pay his losses. He resigned but the directors took note of his character and reputation and retained him in office. A test case went to The Board of Arbitrators who found that the shorts knew well what they were doing and forced them to pay the settlement price in lieu of delivery.

Taylor called 1872 a year of intense activity in speculation and discussed corners, manipulation, and difficulty in making delivery. One of the more outstanding of these had to do with oats and was operated by Mr. Chandler, a prominent merchant. He peddled "puts" about the city, inducing speculation on the part of a large number of people not ordinarily in the market. Chandler and his friends did not count on a large inrush of oats attracted to Chicago by the high prices and the corner failed. Many people lost money and there was much public indignation. One farmer from 35 miles west of the city was said to have sold a contract for 15,000 bushels at 38 cents. He was unable to get his oats into storage and had to pay 41 cents for his contract. When he was later able to move the oats into an elevator he received only 31 cents.

All of this activity resulted in difficulty in settling losses and in charges of fraud. There was a new margin rule passed that called for the right to demand 10 percent margin plus the change that had taken place in the price. Thus the concept of a maintenance margin was introduced. It also developed that there

were far more warehouse receipts outstanding than there was grain in the city. Bins were found to contain false bottoms. The Board sought authority to measure warehouses but this was only partially successful. Firms seemed to be going broke frequently and buying each other, only to have the tide flow back with the bought firms buying the buyers. Most of the characters remained on stage. The Board rigorously suspended the members who were in financial difficulty but they came back rather quickly. In 1873 there was a new rule on suspension for failure to fulfill any obligation or contract or for making false or fictitious reports of purchases or sales.

In 1874 the Grange, a powerful farm organization in Illinois, attempted to get a law passed calling all contracts in futures gambling and prohibiting contracts for sale except as the actual commodity was owned. The Board argued that speculators were the best buyers and protected farmers from merchants who attempted to buy as low as possible. While the Grange bill failed, a law was passed prohibiting trade in options to sell or buy (in contrast to futures contracts), forestalling the market by spreading false rumors, cornering the market, or attempting to corner the market.

In July of 1874 there was litigation in the courts regarding settlement of losses in an 1871 "corner." The court found that the 1874 law did not apply but that the 1871 transactions were gambling and could not be enforced because delivery could not be made nor was intended.

The law seemed to be disregarded because there are accounts of two great corners, one in oats and the other in corn, in the latter part of 1874. The position of the Board was that there should be no rule which countenanced or encouraged nonfulfillment saying "No corners can possibly occur when dealers refrain from selling what they have not got, and we recommend this course to those who wish to avoid the usual risks attending transactions of this character." However, a rule was passed fixing responsibility for establishing a settlement price at "commercial value" in the event of default. In 1876, defaults on the 1875 corn "corner" were settled at 48 cents while the market price at the end of the year was 53 cents. The longs were incensed and threatened to take the matter to the courts. They were persuaded to accept the ruling of the arbitration committee by being threatened with disciplinary action for running a corner.

At this point a digression to sample the mood and character of Chicago and the Exchange in 1875 seems worthwhile. We quote Taylor: "On January 13, The Board of Trade was the scene of a demonstration which caused considerable adverse comment in the press and on the part of the more sedate members. King Kalakaus, King of the Hawaiian Islands, was the guest of Chicago and was received on 'Change. He was escorted to the Office of the Directors, where an address of welcome was given by President Armour, to which the King responded. He was then taken to the Exchange room, where he was given a boisterous reception, the younger members joining in singing what was then a

popular song, 'The King of the Cannibal Islands.' Order was finally restored and President Armour made a speech, to which the king replied with a bow. Mayor Calvin then spoke, saying: 'I have the honor of escorting into your midst the King of the Can——' This was greeted with a tremendous outburst of laughter and the mayor apologized, but the King was evidently offended and left the chamber. Later, two members attempted a burlesque reception, one representing President Armour, and the other, in a black mask, representing the King. This was too much for the self respect of the Board. The offending members were hooted down, a drum head court martial was held and they were suspended for one week. The following day, J. R. Bensley, C. T. Wheeler, and A. S. Burt were appointed as a committee on decorum."

In 1877 there was an account of the suspension of D. H. Lincoln and Company. Mr. Lincoln was the newly elected President of the Board. He gave as the reason for his suspension the failure of correspondents to make good their margins. Accounts were settled on the basis of 25 cents on the dollar. Lincoln continued in office and in the commission business but in January, 1878 he was forced to suspend although his liabilities were only \$2500.

In February, 1879 the resumed tide of speculation set in and Chicago was the scene of the wildest and most general speculation it had ever known. The Arbitration Committee fixed and enforced settlement prices in a wheat situation in which the shorts were unable to deliver. Corn prices were also subject to wild gyrations and there was extensive discussion of corners.

Eighteen hundred and eighty is notable for the failure of Mr. Dow, President of the Board. He paid off at 45 to 50 cents on the dollar. The decade seems to have been one in which presidents were especially vulnerable. Perhaps they paid too much attention to the business of the exchange and too little to trading.

Eighteen hundred and eighty-one was a year of great speculation. Scarcely a month of the year was free from cornering operations in some branch of the trade. The volume of trade was greatly increased and vast sums of money were made and lost. In this year, the Board seems to have grasped its future. Until this time, as we have noted, the general attitude of the exchange was that it was primarily concerned with trade in cash commodities and that the speculative activity was disapproved. The rules had been changed as crises arose. But in 1881 they seemed to see the potential of a large speculative market and to positively adjust rules and the conditions of trade to facilitate speculative activity. The following year was the year of contention in which there was extensive resort to the decisions of committees and to the courts. This might well be identified as the time that systematic commodity speculation came of age. There was a general dissatisfaction with the fixing of settlement prices in the event of default. After much controversy a vote was taken and the rule prohibiting corners was repealed.

By 1884 the list of suspensions was short. The trade appears to have matured

to the point of operating with more restraint. More particularly, close attention was paid to margin requirements and the enforcement of margin rules and to placing greater responsibility in the hands of the clearing house. From this time on there is little reference to suspension for lack of funds, defaults on contracts, and settlement prices. The general policy of forcing the longs and shorts to settle in open trade or by delivery was clearly established and the clearing house margin system was the instrument for contract enforcement.

Tightening up of financing rules and practices by no means reduced the speculative enthusiasm nor decreased the growing importance of the market. A contemporary view of the scope of the market and the manipulative problems with which it was beset was presented by H. D. Lloyd writing in *The North American Review* in 1883 "the greatest of these price factories is the Chicago Board of Trade. Thirty years ago its thirty-eight members were scouring the country back of them to persuade the farmers to send their stuff to Chicago for sale. Cheese, crackers and ale were spread out in the Board room to induce the members to attend, but for days in succession, the minutes read: 'None present.' Last year the Board received and paid for \$382,000,000 worth of farm products and the total of transactions was not less than \$3,000,000,000. It has become not only the chief of the food markets, but the greatest speculative market in the world, as an authority on speculation testified last winter before the New York legislature. It is the only market to which all the world goes to trade. Orders to buy and sell come to it daily from London, Liverpool, Glasgow, Edinburgh, Dublin, Cork, Bordeaux, Marseilles, Zurich, Havre, Antwerp, Amsterdam, Berlin, and Hamburg. It gives the American farmer the best of markets. No other farmer has such a market as this which mobilizes and cashes the crops of The Mississippi valley. Its scores of railways fetch and carry; its banks, stretching from Zuider Zee to the Yellowstone, bring the capital of the Bank of England and of the Hopes of Amsterdam to meet the farmer when he drives up to the country station with a wagonload of grain to sell. Its telegraph wires tell him of the prices, the weather and the supply and demand of the world.

"Corners used to come on The Board of Trade once in a year or two. Now there are corners almost all of the time. The Chicago corner used to be the venture of some local titan and was felt only within the then provincial jurisdiction of the Board. Now it is often the cosmopolitan work of the combined capitalists of half a dozen cities, and its effects, as *The London Times* said of the Pork corner of 1880, are felt in advancing prices all over the world. . . . The corners generally used to fail; but the accumulative experience of many collapses has not been in vain. . . . During the wheat corner of 1879, three out of every four flouring mills in the country were kept idle for over two months. One of the oldest members of the produce exchange prepared for the legislature an estimate that this syndicate, by not selling and not letting others sell and by

fleeing those who had been inveigled into dealing with them, and by the injury that had been done to the millers, the shipping interests, the exporters and the consumers of flour, had caused a loss to the country of not less than \$300,000,000."

The greatest speculative era lay ahead and the markets tended to be dominated by towering individuals, each in his own time and his own commodity. We will return at a later point to consider some of the more notable market activities in enough detail to appraise them. For now we should mention a few of the notable events. Eighteen hundred and eighty-eight was the Hutchinson year in which this old, renowned speculator dominated the market. During this activity it was said that the speculative activity was general. In 1889 Hutchinson again dominated the market but ran into increasing opposition and lost money. In 1891 there was a notable corn corner. The price rose from 60 to 80 cents during the third week of November before it declined to 75 cents. Many defaults on delivery were settled at 75 cents. At the close of November delivery, cash corn fell to 46½ cents. In May, 1892 the price of corn rose from 47 cents on the 16th to 71 cents on the 21st, declined to 60 cents on the 22nd. Coster and Martin were said to be the important longs. On the 31st the market opened at \$1.00 with Coster and Martin receiving a deluge of offers backed by deliverable corn. One of the longs in the group, Bartlett, offered to sell at 90 cents. The crowd quickly grasped the significance of this and the price fell to 50 cents in thirty seconds.

One of the more notable operations was that of Leiter in 1897 and 1898 in which he opposed Armour and lost. In 1900 Sir Thomas Lipton joined the Chicago Board of Trade, cornered the pork market and lost heavily. Speculative trade in wheat in 1900 was said to be 50 to 100 million bushels per day. In 1901 the talk was of the Phillips activity in corn. In 1902 James A. Patten came on the scene with a major bull activity in oats. He was of growing importance until he managed one of the most notorious of all manipulations in wheat in 1908 and 1909.

Attempts were made from time to time to broaden deliverable grades and generally ease delivery terms to reduce the vulnerability of the market to control. It was argued that hedging trade was being driven from the market by frequent corners. These proposals were generally turned down, sometimes by overwhelming margins. Clearly, the interest and emphasis was on speculative trade.

Bucket Shops

Description of the tone of the era is not complete without mention of bucket shops. To bucket an order is for the receiver of the order to cover it himself without making a contract with someone else or clearing the transaction. No

bonafide trade is made. A bucket shop was a business that accepted orders and simply took the other side without the transactions ever actually being made. The prices were those made by actual trading on an exchange. The bucket shop received the quotations of the exchange and "filled" the orders at those prices. It was a system of wagering on price changes.

Bucket shop activity started in the U.S. about 1876 and persisted until about 1915. The bucket shops were disapproved of by the exchanges and various governing bodies—state and federal—as gambling devices and, after a long struggle, were eliminated. The main device in their elimination was control of quotations without which they could not function. This was not easy because, as dissemination of quotations was restricted, so was trade feeding in to the exchanges. Further, a strong claim was made that information about prices on exchanges was public property and could not be restricted.

The bucket shops were not back-alley operations. Some set themselves up as exchanges who formed sub-exchanges where they actually traded or had the appearance of trading. Others advertised themselves as commission houses and had all of the appearances of legitimate houses. There were bucket shops in all major cities in central and eastern United States. To the participating public speculators there was no real difference; whether they bet on the prices generated by other peoples' actual trades or made real contracts was neither here nor there. The outcome in terms of gains and losses was the same. The fact seems to be that a high proportion of bucket shop customers did not know the difference between a bucket shop and a commission house.

The beginning of the long bucket shop battle was an advertisement in the Chicago newspapers in 1876:

RUMBLE and COMPANY

"My \$1,000 was made from \$20 and \$100 invested in grain by Rumble & Co., grain and privilege brokers, 132 LaSalle St., Chicago. Weekly reports free. Circular tells of puts & calls."

The advertisement was noted at the Board and inquiries were made. It was publicly announced that Rumble and Company were not known at The Board but the matter did not seem to cause much consternation at the time.

In 1878 Taylor⁸ commented: "The bucket shop was gaining a foothold in Chicago, and several mentions of this nefarious industry were made during the year. The evil had not grown to such an extent, however, that any action was taken, or perhaps thought of by The Board of Trade. Chicago papers of January 27 contained the announcement of the 'Free Board of Trade.' The announcement ran: 'Every man is his own broker; middlemen abolished and each operator to conduct his own transactions on accurate information. Established by

⁸ Op. Cit. p. 565.

W. C. Lincoln, on the model of The New York Public Produce Exchange Hall just behind Board of Trade in old Toledo building. Telegraphic connections with Board of Trade. No deal over 5000 bushels. Commission $\frac{1}{8}$ of 1 percent.' In February the Tribune said: 'It is reported that Bucket Shops, as they are called in New York, are about to be opened in Milwaukee and St. Louis. Of course the proprietors of these think that no family is complete without one.' In March it was stated that The Free Board of Trade, which was dubbed 'The Pool Box Board,' had increased its commissions to $\frac{1}{4}$ of 1 percent with 1 cent margins. W. C. Lincoln was given as the manager, and Clem Periolat, Billie Clapp, Dan Loring, and Lawrence and Martin are mentioned among the owners. It was stated that the concern had been losing money. The fact that there were few other mentions of the 'Bucket Shops' during the year is proof that they were not viewed with particular alarm."

The most vivid account of bucket shopping appeared in the Chicago Tribune on September 28, 1879. "In July last, the great corner in wheat closed up, the price holding as high as \$1.05 per bushel until the settlement was made, when it reached 93 cents, and still later to 87 cents and to 83 cents. Since the first ten days in September, the tendency of the price has been upward, and on one day last week it touched \$1.08. At the first sign of advance the gambling began. In all previous years the excitement of this kind of operations was confined to The Board of Trade, that is, the operations have been carried on by members, for, and on account of outsiders. But this year has witnessed the success of institutions which bear the euphonious and expressive title of 'bucket shops.' To do business on 'Change an outsider has to hand over his \$100 or \$1,000 to a broker, who, for a commission, invests that amount either in a purchase or a sale, putting up the money as a margin. At the bucket shops no broker is necessary; any person, man or woman, boy or girl, white, black, yellow or bronze can deal directly. That is, by putting in \$1.00 or \$3.00 or \$5.00 or \$50.00, at the rate of 1 cent per bushel, he or she, becomes the owner of the risk in 100 or 300 or 500 or 5,000 bushels of wheat. If wheat advances 1 cent per bushel, the investor doubles his stake, if the price falls the loss is proportionate. As a general rule the winnings are few—so few and exceptional that it may be said that 99 or even a greater percent of the money deposited in the bucket shops remains there. The fraud, cheat and swindle are so transparent that it seems to be a libel on common intelligence to admit that these establishments do an immense business every day. The most surprising thing is the general character of the customers who patronize these establishments. First—there are the boys—lads from 12 to 16 years of age, school boys, cash boys in retail stores, boot-blacks and newsboys, messenger boys, boys of all degree and occupations, who singly, or by combinations of two or more, can raise \$1.00 or \$2.00 or \$5.00. These rush to the Board of Trade alley, where the shops are in operation, and by the hundreds pour in their money. The occasional profit of $\frac{1}{4}$ or $\frac{1}{2}$ or 1

cent a bushel, serves to whet the avarice and inspire the appetite for new ventures. Sometimes these lads, also represent school girls and sisters, whose small savings are also sent to be emptied into the bucket hops. Boys of larger growth and men, clerks, salesmen, bookkeepers, men in business, hackmen, teamsters, men on salaries, and men employed at days' work, stone cutters, blacksmiths and workmen of all wages and occupations; students and professors of colleges, reverend divines, dealers in theology, members of Christian Associations, members of societies for the prevention of cruelty to animals, and for the suppression of vice, gentlemen who war on saloons which allow minors to play pool, and teachers of Sunday Schools, hard drinkers and temperate men, old men and young men—as well as those of all classes who live in the cities and towns of the state, and of Indiana, Wisconsin, and Michigan, and even occasionally an Ohio man, as those who live in Chicago—all, in person or by agent, purchase their 500 or 1,000 or 5,000 or 10,000 bushels, depositing their margins, and confidently hope to have their money back with 100 or even 500 percent profit.

“These unfortunates do not include the most daring and reckless of all gamblers who do business in the bucket shops. There is not an average woman who thinks her means are more scant than she would like to have them, who does not in her heart despise the caution, or, as she calls it, the cowardice, of the average man, nor is there one who does not insist to herself that, if she were only a man, instead of being cruelly condemned to be a woman, she would go on that Board of Trade and just sweep The Board, making enough money in thirty days to render herself and her husband and family independent for life. Confidence in her own courage and the belief that men fail because they won't succeed, make her chafe under the conventionalities which exclude her from money-making walks of life, and the bucket shop opens to her imagination the longed-for opportunity to show what she might do if she had only a chance. To these shops, women come with their tens, twenties, and fifties, and boldly stake their money. They are not women of desperate or questionable condition, they are the wives and mothers of families in comfortable financial condition. To a woman of this kind, the bucket shop, which holds out a chance to win 200 percent in 24 hours, overcomes all other considerations, and she boldly stakes her cash and with her ticket under her pillow, dreams of the time when with plethoric purse she will be recognized as a first-class customer in every dry goods house in Chicago. The ventures of these women are not confined to the bucket shops; they venture their money through brokers on 'Change, in deals not only in grain, but in pork and lard, and everything else in which any other person has at any time ever made money by bold, daring, reckless and furious gambling. But, while this is the case to some extent, the great part of these dealings by women is in the bucket shops; there the deal is direct and the result soon known, and, as all these operations are made unknown to husbands, the

facilities for secrecy are much greater than in the higher grade of business. A lady can pay her \$50 at the bucket shop and take her ticket in any name she may select, or even without any name at all, and in the case of loss, no one is the wiser. In case of gain she can, as she invariably will do, reinvest both stake and gain, and lose all at one fell swoop.”⁹

Bucket shop operations were generally quite profitable. The customer traded on such thin margins that they were quickly taken out until they could raise a new stake. When they won they were encouraged to put back the profits until they lost. In addition, some commission was charged and the cost of doing business was small. But there are accounts of the frequent bankruptcies of the shops. The patrons knew only to buy and this put the operators in a chronic short position. When prices rose they lost money and when they did too much business in relation to their reserve funds they went out of business. The obvious solution was to lay off the net open positions that they did not want to assume by trades on the exchange. There is no record of the extent to which this was done. The exchange prevented it to the best of its ability.

Conclusions

The foregoing selective sketching of some bits of the history of futures trading suggests several general conclusions regarding what futures are about. The first point that should be recognized is that the markets evolved, over a long period of time, out of the surrounding commercial circumstances. They are a product of their own long history and the story of futures trading is closely related to that of trade in cash commodities.

The basic impetus for futures markets related to inventory risks, and financing and pricing problems. As commerce developed and required the accumulation of inventories, particularly of seasonally produced crops, merchants and processors found themselves with problems that were best managed by forward contracting. This forward contracting developed into standard procedures that were eventually codified and formalized into futures trading.

Forward contracting quickly moved away from commercial interests into the hands of speculators. Relatively little was gained by passing risks from people who did not want them and could not carry them to people who didn't want them or couldn't afford them either. Forward contracts could be made with other commercial people only by the payments of substantial risk premiums which partly compensated the buyers for risk but in addition reduced prices enough to eliminate a high proportion of the risk. These lower prices were reflected back through the marketing system to producers who bore the brunt of the cost. Thus, early in the development, speculators became an essential part of

⁹ As an aside, one wonders whether Journalism lost some of its character between the 19th and 20th centuries.

the process. They were better able to assume the risks of price change than were the commercial interests.

Speculators did not step nobly forward to assume their necessary place; they rushed in with enthusiasm and abandon to participate in an exciting game that held out the promise of possible huge profits. They cared not at all about their place in the economic world but were motivated by avarice and excitement. In large measure, they took the play away from the commercial trade. Speculation, then, is an activity in itself.

Markets were beset with problems of rigging, manipulation, power plays, financial failures, and technical problems of delivery. And, for a very long time, there was a limited desire or inclination to correct the procedures. For every bit of new speculative blood that flowed in there was someone waiting to lap it up. The exchange members recognized that they had a good thing going when they could control and work the technicalities of the game. This is likely too harsh a judgment; they were by nature opposed to rules that circumscribed their behavior, a fiercely independent bunch of swingers. They not only stood ready to devour the outside participants but fought great battles among themselves. The readiness with which they forgave defaults on indebtedness and restored culprits to good standing makes one wonder if they were not more interested in the game itself than in making money.

As time passed and the size of the market increased, the amount of disputing also increased, and increasing recourse was taken to the law. There was increasing public concern about problems that beset markets. One source was the effectiveness of the markets in filling their underlying roles as risk shifting and financing institutions. Some of the members were primarily concerned with this aspect of the trade. Producers recognized that markets free of problems of control were more useful to them than markets as they existed, although understanding was far from sophisticated and most of their criticism was misplaced if not completely in error. A second source of public concern stemmed from concepts of morality-immorality that related to the then prevailing ethics regarding gambling.

These stresses from both within and without the markets led to the development of rules promulgated by the exchanges and to increased governmental influence. Thus, futures trading came to be much about how to make the markets work efficiently and fairly.

Finally, we note that there was a superstructure of activity built up that related to the incomes of people and firms from sources other than price changes. Commission houses, brokers, and exchange employees were the core of this group. They were responsible for bringing in new money, new players, looking after them as best they could, and running the game. They developed a large stake in the game itself without regard to its outcome or the functions that it performed.