THE business of buying and selling is one of the oldest activities of mankind, and yet it is one of the newest fields of specialization in economics. Some call it an art, and others insist that the subject of marketing is a science. A study of the evolution of market organization has always intrigued me, and some researchers find the institutional approach a rewarding one. A study of the history of markets could engross a scholar for a lifetime, and when the Master calls, leave him with the feeling he had barely finished the preface. Similarly, the one who attempts to trace market negotiations through the tortuous labyrinths of legal arguments and judicial findings may experience a sense of acute frustration.

The one who obstinately insists on tracing markets to their origin through a study of social habits, customs, conventions, forms, rules, regulations, restrictions and practices is a person of no mean ambition, because he is plunging to the core of the subject: Marketing. Transactions are essential to attain ownership which in civil society assumes a multiple significance bearing on the usefulness, the quantity, the future use, and the legal control of the thing which is being transferred.

[1]
Marketing is primarily a legal-economic-ethical relationship formed between man and man in their effort to acquire rights to scarce goods which they believe will have a future value. Within this reference frame we define a market as an institution designed to facilitate the transfer of legal rights and titles to ownership in goods, services, and properties. The function of marketing has been so broadly described by some writers as to include all activities affecting a product as it emerges from the stem or the stalk.

I am not wholeheartedly in agreement with this approach to marketing because it includes in my judgment, too vast a field. It encompasses the total field of production economics as well as marketing.

First of all, it should be recognized that in a marketplace, it is not physical commodities that are actually bought and sold, as most people believe. It is the legal rights, or titles to goods, properties or services that are bought and sold. How else can one explain the numberless transactions in incorporeal and intangible properties that take place every day of the year in an economy such as ours?

The Five Stages of Market Development

In looking at the history of markets, it is my belief, that market organizations can be found in all stages of development today owing to the uneven degrees of social and economic advancement extant in the nations of the world. This general cross-section view of markets showing progressive gradations of development as they have come down to us from the past, ranges from a system of ceremonial gift-giving which prevails among certain primitive tribes in various parts of the world, such as in the Southwestern Pacific, to the highly formalized modern produce exchanges dealing exclusively in futures contracts. The five stages with a brief description of each are illustrated in Chart A.
### Chart A

**Stages in The Evolution of Market Organization**

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gift Giving</strong></td>
<td><strong>Barter</strong></td>
</tr>
<tr>
<td>1. Pure gifts tendered out of esteem and love — unilateral, intrafamilial or intra-tribal.</td>
<td>1. Exchange simultaneous based on usefulness. Isolated and not greatly influenced by other trades. Bilateral.</td>
</tr>
<tr>
<td>2. Gifts, social, given for prestige, honor, social standing, unilateral.</td>
<td>2. Exchange more sophisticated, rationalized on basis of collective valuation and future anticipated needs. Often complex — bilateral — isolated.</td>
</tr>
<tr>
<td>3. Gifts for anticipated gifts — bilateral but not equivalent.</td>
<td>3. Coercive barter notion of pairing need for need.</td>
</tr>
<tr>
<td>4. Gifts reciprocal-bilateral for equivalence in values. Trade intratribal — led to next stage.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 3</th>
<th>Stage 4</th>
<th>Stage 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash Markets</strong></td>
<td><strong>Contract to Arrive</strong></td>
<td><strong>Futures Market</strong></td>
</tr>
<tr>
<td>Came into existence with the invention of a medium of exchange. Goods exchanged simultaneously for cash.</td>
<td>For specific good or its equivalent. Delivery after time lapse. Payment on delivery. Sale on sample usual, but may be made on description, court of law.</td>
<td>First recorded use Japan 1697 and legalized 1730; England 1826; and in the U. S. 1867. Primary function pricing, transaction closed by off-set contracts. Courts of equity. Prices projected into future trade in incorporeal and intangible properties. Specialized in risk assumptions directional in service. Dominant. Continuity of action. Overt and free.</td>
</tr>
<tr>
<td><strong>Spot Markets</strong></td>
<td><strong>Contract to Deliver on Sale</strong></td>
<td></td>
</tr>
<tr>
<td>Samples displayed of specific lots offered for sale. Delivery not simultaneous with sale. Payment tendered following delivery. Title passes at time of payment.</td>
<td>On sample basis or description. Lapse of time for delivery-payment at time of delivery or shortly thereafter. Bridge to futures.</td>
<td></td>
</tr>
</tbody>
</table>
In a series of interviews with speculative traders, an interviewee expressed the opinion that fifteen years from now if someone should even mention the terms "spot markets", his listeners will say, "What do you mean? What is a spot market? Spot markets are going out of existence within the next ten to twenty years." I believe there is some basis for this thought if one distinguishes between spot and cash markets.

The cash market is actually the consummating market. This is where the final transactions take place. If one includes most of Asia, a great part of Europe, Africa and South America, the inhabitants therein have no knowledge extending beyond the cash market. The average individual has no concept of a futures market. They have no working knowledge of futures markets or their functions.

In reference to Chart A we find a definite indication of the difference in degree of development in our markets here and abroad.

Growing out of spot and cash markets, we have the "contract to arrive" and the "contract to deliver", or the fourth stage of development. This is an area that intrigues me very much, and one in which it would be a pleasure to spend much more time doing research.

This is the type of contract evolved in Chicago in mid-nineteenth century which eventually grew into the highly developed futures markets we have operating in the Board of Trade today.

The futures market is the fifth stage of development; the first recorded use of the futures market was in Japan in 1697, and it was legalized in 1730. In England, the first known transaction on a futures basis, a purely incidental trade, was in 1826. In the United States, the claim is that we began trading in futures in 1867.

I foresee the possibility of a sixth stage in the evolution of
ORIGIN, DEVELOPMENT AND ECONOMIC STATUS

markets which I may allude to later. In my judgment, approximately ninety percent of the transactions in our economy take place in either stages four or five, today, in this country. This relegates ten percent to gift-giving, barter, and to the cash markets; primarily cash markets.

The business of the Chicago Board of Trade now approximates $50 billion per year, which is roughly three times the total value of all farm products at the farm. On last count, we had twenty-six commodity exchanges in the United States, and they were all doing a considerable volume of business. The total volume of sales in these markets would be many times the value of all farm products at the farm.

Change Through Necessity

In the evolution from one stage of market development to the next, it is interesting to note that it was businessmen, rather than economists, lawmen, statesmen or philosophers that were the innovators of new procedures in devising exchanges, and in negotiating the terms upon which transfers of titles to wealth were to be made.

Whenever these intrepid traders came up with a new technique, however, the change appears to have been forced upon them out of the necessity rather than being presented as a scintillating perception of how things should be rather than what they are.

The bill of exchange was conceived by the medieval traders in the 12th century. It was called the "Fair Letter". This form of payment was evolved out of necessity because barter was too cumbersome, and carrying gold and silver over the trade routes in medieval times too dangerous. The fair merchants trusted each other implicitly, so they settled their large balances at the Fairs of Champaign not in the coin of the realm but by a letter which could be presented for payment through a goldsmith at Genoa, Venice, or some other
FUTURES TRADING SEMINAR

trader's home base. The "Fair Letters," when first drawn, were bilateral covenants. Later they evolved into multilateral agreements making them negotiable for convenience so they passed from hand to hand among the traders of Europe whether they came from the North countries of the Goths or the Southern regions of the Latins or the Moors.

There is even evidence that these "Letters of Credit", were used as down payments on future orders. The merchant's code which was later absorbed or blended into the common law of the Anglo-Saxons, of course, provided the necessary sanctions to keep the unscrupulous traders in line. They feared the censure of the medieval Pie Poudre summary courts much more apparently than our merchants fear our courts.

For one thing, justice, then, was much swifter and less temperate respecting debtors, than it is today. So it was, in the feudal centuries from 1100-1300, that the itinerant merchants of that period improvised some basic devices to facilitate trade and exchange. These were:

1. The merchant's code — later to be embodied in the common law governing commercial transactions.

2. The "fair letter" which came to be known later as the bill of exchange.

3. The negotiability of contracts. Among the migratory merchants it became the custom to be "as good as your word". Thus parol contracts were enforced in the pie poudre courts on the basis of mutual assent as a binding force transmuting one promise into a consideration for another promise. When the merchant law was absorbed by the common law, legal authorities had their misgivings about the principle of consideration based on the circular doctrine of mutual promises. The contractual elements constituting a legal transaction were evolved in time from the wide-spread use of these enforceable agreements. The elements which constitute the body of the
transactions are:

A. *An Agreement* — The buyers and sellers strike a bargain in which the seller offers to deliver something of value and the buyer accepts the offer agreeing to give in exchange other things of value or to settle the difference with an acceptable medium of exchange.

B. *The Transfer* — Action is taken to deliver physically both goods and titles from vendor to vendee.

C. *The Payment* — The payment is a counteraction in which other goods, money, or titles are delivered in hand by the buyer to the seller as compensation for the latter’s services or endowments.

D. *The Warranty* — The warranty is a mutual exchange of assurances that the goods or titles given in the exchange will be in full measure, pure, and of as good workmanship as they were represented to be at the time of the transaction. Without this element of assurance to buyers and sellers, it would be almost impossible to make forward commitments in the form of future contracts.

4. It was the businessmen of the medieval period who deposited their profits (working capital) in the form of gold, silver, and other precious objects with the goldsmiths of the era for safe-keeping. After they had devised the “fair letter”, it was no longer necessary to carry gold and silver to the fairs as media of exchange, thus running the risk of losing it to highway brigands or the robber barons. The goldsmiths discovered they could make loans on the basis of these reserves while the traders were far away on their trading expeditions; so the merchant’s code, the medieval bills of exchange, and the negotiable contracts formed the basis for turning the goldsmiths into bankers. In time, some of the people who
specialized in this business became the wealthiest and most influential men in Europe. Reference here is to the Italian Medici family, the German Fuggers as well as other famous banking families of Tuscany, Germany, North Central Europe, and other places in Medieval Europe.

The Origin of Futures Markets

According to my latest findings, credit must go the feudal landowners of Japan for being the innovators of a futures market. In the Tokugawa era, the feudal lords in that period were required to spend at least half a year in Edo (Tokyo) where the central government (Tokugawa Shogunate) was located. This was by decree of the Shogunate, and the reason why the ruling potentate wanted his lords to remain where he and his trusted buddies could keep an eye on them was one of precaution. He didn’t want them to create a rebellion in some remote part of the empire, form an army, and separate him from a soft job with all its emoluments.

The rents these absentee landlords collected were paid in kind — i.e., rice, because the workers on the land were in feudal tenure, and in an economy of self-sufficiency. In the urban centers of Edo and Osaka, they had already evolved a money economy. The absentee landlords, as I get the story, were living “high on the hog”, and they needed money to meet their obligations. In that era, if one belonged to the upper class, he was expected to keep up appearances. I believe they called it “saving face”; so when one was invited to some function at the court he was expected to be dressed for the occasion. Judging by the costumes worn in the Mikado, the haberdashers weren’t in business just for pleasure.

Understandably, the titled nobility had to have cash to participate in this form of gracious living so they had the rice and other agricultural products grown on their manors hauled into Edo and Osaka where they sold them for cash. This, of
ORIGIN, DEVELOPMENT AND ECONOMIC STATUS

course, would be in the spot market. It is a well known fact, of course, that rice and other crops of agriculture are seasonal, so harvests and shipments were not evenly spread over the year. Moreover, some of the nobles didn’t confine themselves to a budget. They ran out of cash before the next harvest came in. Why did they run out of cash? Let us examine the problem, point by point.

1. The landlord had to go to his estate, of course, to check operations and collect his rents, but the shogunate wouldn’t permit him to take his wife and children along. They had to remain in Edo as hostages. They were a pledge of the noble’s loyalty to the court. Thus, the nobles were forced to maintain two households, one in the country and one in the city. Everyone knows that one cannot run two households as cheaply as one.

2. When the nobles ventured out into the hinterland, they had to travel in style to impress the country people. This called for an elaborate migratory retinue, much formality, and dignified ritualism. This was not a matter of individual choice. The shogunate prescribed what had to be done, since the noble was in a sense his traveling ambassador. A large number of samurais made up the pilgrimage.

3. Moreover, the shogunate frequently ordered his nobles to contribute liberally to public works such as building and repairing castles, constructing roads, reclaiming land, and providing for the maintenance of armed forces.

Is it any wonder that the invincible knights of the realm ran short of money now and then? Often they had to raise cash quickly to meet some emergency; so at first they issued tickets (warehouse receipts, we call them now) against supplies they had stored either in the country or in rented warehouses in the city. Wholesale and retail merchants bought these tickets against anticipated needs. I guess we call this anticipatory
FUTURES TRADING SEMINAR

hedging now. Eventually these “rice tickets” were made negotiable and became a form of currency to facilitate the transaction of business. The warehouse receipts were avidly bought up by the mercantile class. I might add, the warehouse receipts were first administered by public officials of the shogunate, but later the whole matter of issue and supervision was taken over by the merchants.

In time, the merchants began extending credit to the nobles in advance of the sale of the tickets (warehouse receipts). Need I add, “Naturally, at a high interest rate”? Soon some of the merchants manipulated the market and became very wealthy. When they became affluent, they expanded their business operations and grew even wealthier. I presume, richer by a good deal, than some of the nobles— all they lacked was a title.

One particularly wealthy merchant named Yodoya in Osaka dominated the rice trade in that city; his house became the center where many of the merchants met to exchange information and negotiate transactions with one another. “The price at ‘Yodoya’s’” was regarded as the prevailing price in the city of Osaka. This actually became the first commodity exchange formed in Japan— circa 1650. Later, in 1697, Yodoya was moved to another location— the Dojima district in Osaka and thereafter the rice exchange became known as the Dojima rice market.

The striking feature about this market was that only trading in futures was permitted. A rule was formulated which stipulated that all transactions were limited to “cho-ai-mai Akinai” which literally means “rice trade on book”. In 1730, the Tokugawa Shogunate officially recognized this commodity exchange which had been voluntarily developed by private traders. This institution and the system evolved for consummating transactions were declared legally permissible and protected by the highest authority of the realm. It was offi-
ORIGIN, DEVELOPMENT AND ECONOMIC STATUS


Rules of "Cho-ai-mai" Trade (Rice-trade-on-book)
The traders on this Oriental commodity exchange were orderly and well disciplined. Their rules, as nearly as I can reconstruct them were as follows:

1. The contract term was limited to four months.
2. The year was divided approximately into three four-month periods.
3. At the end of each contract period the market was closed for a few days.
4. Trading was carried on in rice only.
5. All contracts in any four-month term were standardized.
6. The basic grade for any contract period was chosen by the traders by majority vote. There were four grades available.
7. No physical delivery of grain against outstanding contracts was permissible.
8. All differences in value had to be settled in cash.
9. All contracts had to be settled and accounts cleared on or before the last day of the trading period.
10. No contracts could be carried over into the new contract period.
11. All trades had to be cleared through a clearinghouse.
12. Every trader was required to establish a line of credit with the clearinghouse of his choice.
13. Any default in payments was borne by the clearinghouse.
14. The clearing houses were non-profit operations, but a commission was charged for services rendered.
15. No new contracts could be made during the last 3 days of any trading period. I interpret this rule to mean that these days were reserved for the business of clearing any trades by ringing-out or matching long against short outstanding con-
tracts then in existence. Thus, at the end of this four-month period all trades would be cleared of record.

16. An arbitration committee was evidently in existence, and it was empowered to adjudicate disputes and arbitrarily settle issues concerning values and prices. The Cho-Ai-Mai futures market, if my information is correct, preceded our first futures market in the Western hemisphere by 129 years, i.e., England 1826, or the earliest futures transactions in this country by 170 years.

Toward the end of the Tokugawa era, the economic situation became erratic and prices fluctuated wildly. So much so, that the prices in the spot market had little relationship to the prices made in the futures market. The length of the contract was first shortened to two months, (1863) and finally to one month (1869).

The Meiji Regime

Then, the Meiji regime came to power succeeding the Tokugawa dynasty. It was called the Meiji restoration. At the time it assumed leadership, (1869) several rice exchanges had been established other than the one at Osaka. The new regime proved antagonistic to futures trading because it regarded all futures markets as a form of gambling and ordered them closed before the end of the first year in office. Only two years passed, however, before the government was forced to reopen the exchanges to circumvent complete chaos in the grain markets. This same phenomenon occurred in Germany in 1896, you will recall. On their restoration, physical deliveries were authorized in lieu of a cash settlement which effectively tied the cash markets to the futures markets for the first time in Japanese trading. Commodity exchanges were in operation at Tokyo (Edo), Nagoya, and Osaka. Even though physical deliveries were permissible as a means of settling futures commitments at that time, the scribe notes
ORIGIN, DEVELOPMENT AND ECONOMIC STATUS

that very few contracts were off-set by delivery of actual grain.

In 1876, the Meiji government passed laws designed to eliminate abuses, and more firmly establish the honorable, time-tested customs handed down from past generations of futures traders. At this time, the government insisted that ownership and management of the building and facilities provided to expedite futures trading be owned by an independent company instead of a non-profit association of traders. Soon after the passage of this act, rice exchanges sprang up in more than 10 different cities in Japan. The addition of all these facilities attracted more traders to the exchanges. The more traders there were, the greater became the speculative excesses. The more money that was made or lost in speculation, the more attention the futures markets got from the public. Moreover, producers, consumers, politicians, lawmen, and academicians became increasingly critical of the futures market transactions.

The end product of this turbulence was the passage of the Commodity Exchange Act of 1893. After extensive studies were made of exchanges in other countries, this act made it permissible to form commodity exchanges either as joint-stock companies for profit or as non-profit membership associations. Nearly all the exchanges formed in the 90’s were profit-seeking joint-stock companies, and in the course of 5 years (1898) Japan was well supplied with 128 commodity exchanges. While most of these were specialized in dealing in rice, a number of the exchanges offered contracts in other products such as: salt, sea-products, tea, silk, textiles, and sugar. The government, fearing promiscuous gambling, aggressively moved to reduce the number, and apparently it was successful, since only a few exchanges were recorded actively in business in the first decade of this century.

In 1914, the Commodity Exchange Act was revised making it illegal for officers and employees to engage in trading
FUTURES TRADING SEMINAR

through the exchange which they served. In 1922, the Exchange Act was revised as well as the law relating to the taxation of the exchanges. A number of the exchanges thereafter hastily reorganized as non-profit membership associations. The records show eight such associations in 1927.

The Demise of the Exchanges

After the incident at the Marco Polo Bridge near Pekin (1937), the Japanese government entered an era of tight controls over prices in a war economy. The commodity exchanges lost their raison d'etre.

The Renaissance

Following the occupation of Japan in 1949, there has been a resurgence of futures trading. A new Commodity Exchange Act was passed in 1950. The first exchange to be established under this act was the Osaka Chemical Fibre Exchange. By 1960 there were 20 new commodity exchanges in operation. Five were dealing in fibres and textiles, two in silk, two in dried cocoons, two in rubber, two in sugar, six in grain and one for sea products.

Many new rules and regulations have been spawned by these exchanges that would make it an interesting study for contrast to the mores our traders follow in the business of negotiating contracts and consummating their transactions here and elsewhere in the Occident.

Futures Trading and Hedging

One of our contemporary authors who has become an analytical exponent of Futures trading has focused much attention on the function of hedging. In one article, Holbrook Working presented six concepts of Futures Trading. In one of these, he states that: “Futures markets depend for their existence primarily on hedging.” In my research, thus far I have not found proof supporting this hypothesis. Trading in
futures began here in Chicago in 1867. It was not until the late '70's or early 1880's that the practice of hedging was developed; so the Chicago Board of Trade survived for nearly 20 years without hedging. In Japan, if I read the records correctly, they continued to trade in futures for 172 years without hedging (1697-1869). Since 1950, after adopting our procedures in commodity exchange operations, the Japanese have accepted and are using the practice of hedging extensively. To cite one series of figures which were extracted from a Japanese government report published several years ago, the percentage of hedging trades in cotton yarn #20 was 43.7; in cotton yarn #30, 31.0; in staple fiber yarn 37.2; in artificial silk 25.6; in woolen yarn 25.6; and rubber 22.3.

In my opinion, the primary function of futures trading is that of pricing. The business of projecting prices into the future is a job for specialists, men who put cash on the line in backing their collective judgments. They stand ready to assume the risks for the handlers, merchandisers, processors, exporters, and others who are either unable or too busily engaged in their own specialized functions to concentrate on the meticulous details of projecting prices from a few days to several months into the future. Hedging is an incidental service of futures trading, and it adds volume both in bushels and in income to the commodity exchanges. This observer would be the last to protest the occurrence of hedging in a futures market, but it is not absolutely essential to the development of a futures market. I might add, it serves to make the market more fluid and continuous. To say, however, that futures markets depend for their existence primarily on hedging is simply not true. We would still have futures markets if the practice of hedging were entirely abolished by law or decree.

When one hedges in a futures market he is off-setting a cash
market transaction by taking an opposition position in the futures market. If he doesn't do this, he is a speculator. The hedger is normally in a zero-ownership position. He really doesn't care which way the market goes. Someone else assumes the risk by holding an open commitment. A study of speculative trading was begun some time ago, and it is still being pursued. Some day, you may find an announcement of a new publication on your desk concerning speculative trading and its significance to the futures markets.

The Legal Status of Futures Trading

From time immemorial, the great nemesis of those engaged in trading in futures was the law. There was a long struggle spanning nearly 300 years, from 1610 (Holland — prohibition against short selling) to 1905 (Board of Trade vs. Christie Grain and Stock Co. 198 U.S. 236) in which the Supreme Court finally held that mere substitution by “ringing out” or “setting off” in the clearance of contracts constitutes delivery. The lawmen despite acumen for fine distinctions found it exceedingly difficult to understand the short sale. A reprint of a paper given at another seminar sponsored by the Board of Trade and published in Volume I “Futures Trading Seminar, History and Development” is being made available to those at this Seminar. In this paper I delved into the legal history of futures trading in much greater detail than time permits in this presentation.

The Economists and Futures Markets

The teaching of courses in marketing agricultural products is a phenomenon of this century. A. W. Shaw was one of the first to break into print on this topic, in the year 1912. Then came A. P. Usher in 1913, N. S. B. Gras in 1915, and others quickly followed in the same decade. In the 20's, several books on marketing came off the press authored by men such as Paul Cherington, Theodore Macklin, Benjamin Hibbard, L.
ORIGIN, DEVELOPMENT AND ECONOMIC STATUS

D. H. Weld, Fred Clark, and others.

The first publications were primarily descriptive in content. Later some of the writers attempted to formalize the subject matter in some logical framework. Growing out of this effort were three rather distinct approaches to marketing.

Commodity Approach

These authors concerned themselves with a descriptive account of marketing particular commodities. The chief products of the country or region were taken up seriatim — many in meticulous detail. To the academicians primarily interested in theoretical considerations, the commodity approach is deadly repetitious and prosaic.

The Agency Approach

A few authors organized their subject matter by classifying the work and services of the specialized middlemen such as the country buyers, the brokers, wholesalers, jobbers, commissionmen and retailers. To give a blow by blow account of what these specialized businessmen did led the authors unerringly down the trail of description. Other authors turned to a third way of organizing their texts.

The Functional Approach

Here the authors such as Macklin and others wrote chapters about the characteristics of assembling, grading, processing, packaging, storing, transporting, financing, merchandising, etc., with scant attention to the essential function of pricing. Later authors, not wanting to omit anything earlier writers had considered important, took no chances. They extracted select passages from all three approaches. Larson’s book is a prime example of an attempt to synthesize all three approaches in one small volume.

This briefly was the state of affairs in marketing literature up to the 50’s. After that, there was a turn for the better: Some books appeared giving major emphasis to theoretical
considerations, but the position of marketing as a field for specialization is still in its infancy.

With reference to texts on the subject of commodity exchanges and futures trading, there is something resembling parallelism in the literature up to the decade of the 50's. H. C. Emery set the pattern followed by dozens of authors. Again the texts are oriented toward a description of functions — placing major emphasis either on the historical development, or giving an account of the various functions such as the form of organization, the commodities adaptable to futures trading, forms of contracts, clearing house services, market reports, speculation, and hedging.

A number of traders I have interviewed refer to these treatments as the "illusions of the college textbooks". Referring to these books that have described the futures market, they insist: "In real life, it isn't that way at all"! For example, while the major emphasis in most of the texts is on the function of hedging, the insurance feature of futures trading, the real nature of the hedge is not properly diagnosed. The Chicago Board of Trade is trying to enlighten readers on the subject of "basis trading" which, in essence is a form of hedging. None of these texts gives a very clear picture of the role of the speculator. There are only a few college professors and researchers — nearly all of them are in American universities, institutes, or bureaus — who have focused their searchlights of inquiry on the commodity exchanges. Notable among these in addition to the names listed in the bibliographical appendix of this paper are: Holbrook Working, Roger Gray, T. A. Hieronymus, Allen Paul, and W. T. Wesson as well as others. The danger of listing the names of contemporaries is that one may omit several. The contributions of these men to a better understanding of the futures markets has been notable. It is regrettable, considering the importance of this type market
ORIGIN, DEVELOPMENT AND ECONOMIC STATUS

institution, that more economists have not turned their graduate students with enthusiasm on the theoretical implications of this means of pricing and exchange. There are some excellent thesis topics to be explored in a very dynamic field of economic activity. Through such assignments, the theorists themselves might be intrigued or inspired to plunge into the subject matter at points of special interest to them. To illustrate this point, permit me to mention some of the issues that have tempted me to burn some midnight oil.

Some Modern Concepts Concerning Futures Trading

In my opinion futures trading is not circumscribed or limited to certain conditions or features of the commodity. Some writers have postulated that:

A commodity must not be perishable.
The supply must not be controlled by monopolistic interests.
It must be one for which prices fluctuate frequently and in wide amplitude.
Units of the good must be homogeneous.
The product must be measurable both quantitively and qualitatively either by weight or cubic content.
No manufactured goods or articles, especially stylized ones, are admissable to futures trading.
The commodity should be free of governmental regulations and state trading.
A broad market should exist for the good, possibly a world market.
It must be a basic commodity, etc.

These writers have set up many restrictions circumscribing the activity of a futures market.

Everyone who has read the literature knows that these specifications do not apply with any degree of precision in present day trading. This confirms, in a way, the assertion that the
college people who presume to teach something about futures trading are not certain of the facts, and much of the information currently given to unsuspecting students is almost the opposite of what actually transpires in these markets. For example, on November 30th, 1964, trading started in live beef futures. Such a contract would not be given serious consideration if its formulators were guided by the above prohibitions. I participated in the councils advocating the introduction of this type contract. Admittedly, I was in the distinct minority in adopting this position. Even some of the most experienced traders on this board predicted it would not and could not work. These are traders who have not fully understood the potential of futures trading. Since then, this board has introduced a contract to trade in beef carcasses. Now the Kansas City Board is contemplating offering a similar contract. In time, we may have very active trading in both live beef and carcass beef futures contracts.

I take the position that in the years to come, nearly everything we produce or manufacture in this country may be sold in futures. I can foresee the time when we may be introduced to what I choose to call a universal contract based on index numbers. That will be the sixth stage in market evolution. This suggestion or tentative conclusion is shocking to some people. My dearest friends believe I’ve gone off my “rocker” in even suggesting such a radical evolution. You may be interested in reading the brief discussion on this question in Volume I, Futures Trading Seminar.

Another heresy of mine is the belief that the two markets — the cash market and the futures markets are separable; that they need not be inextricably bound to one another by the fiction of physical delivery.

Still another pronouncement is the hypothesis that “In a true market transaction one man’s gain is another man’s loss.”
ORIGIN, DEVELOPMENT AND ECONOMIC STATUS

I have never accepted the common thesis taught in numerous commerce schools, and by many economists that in a transaction both parties must gain or there won't be a transaction. It's impossible within the terms of the transaction itself for both to gain or both to lose, although each may prefer to engage in the transaction than not do so, otherwise he would refrain from such a step. There are situations, however, where both may just break even in a static situation.

Some Provocative Areas for Inquiry

Associated with this theory arises one of the critical problems in creating a satisfactory basis for trading in futures — namely, the terms of the contract.

The Art of Drafting Futures Contracts

In a number of markets, attempts have been made to establish futures trading for several commodities without success; just to cite one — mill feeds. I have wondered why these attempts failed. One professional emphatically asserted that, "a futures contract cannot be successful unless it favors the sellers." Another, just as vehemently declared that a futures contract has to favor the buyers, or the users in order to succeed. To these positive statements I queried, "What's the difference? They can always off-set the contracts with other contracts rather than take delivery if inequities exist in the contract itself." They have always countered, "Yes, that is true, but look at the penalty they might pay if the terms of the contract are not equitable." Does this logically lead us then to the conclusion that, in drafting a new agreement such a contract must be completely fair and equitable both to buyers and sellers? Or is it true that the contract must favor one or the other? The people who have made these statements have had lots of experience, and have a good basis for their statements, i.e., that futures contracts must be biased in one direction or the other in order to be attractive and to be traded in
FUTURES TRADING SEMINAR

volume on the market. This could be a real field of inquiry.

Advisory Services

There are scores of advisory services which importune prospective investors “every day, in every way” to join their exclusive club. Who are these people? What experiences do they have which qualifies them as advisers? How successfully have they guided the investments of their clients? Are some of these services formed primarily for the purpose of generating business for the sponsoring organization?

What would happen if we turned some graduate students loose on this problem, who might systematically collect and collate 15 to 25 of these advisory services to determine the trend they favor whether bullish or bearish and the reasons they offer for the position taken. What influence do these services have on the general market? Will it cause the market to surge too far pricewise in one direction or the other? Could one safely take the opposite position from theirs on the assumption that they will be wrong more times than right because the astute investors will anticipate over-extensions in market gyrations in advance of their occurrence?

Overtrading

One of the cardinal crimes of speculative trading is excess, i.e., overtrading. This subject, it seems to me, lends itself superbly to theoretical treatment. A definite analysis of its limitations should appeal to a mathematical economist.

Hedging

This is a phase of futures trading that might intrigue any student of marketing. Do most firms hedge all their positions? If so, why? If not, why not? If the answer is in the negative, what portion of the risk do they choose to carry? Can risks be classified? What is the relation between risks carried and the financial position of the firm? At what juncture in the market system are such risks preferably carried?
ORIGIN, DEVELOPMENT AND ECONOMIC STATUS

Pricing

The major grain firms have the facilities and the staff which puts them in an enviable position for entering the market. That is, do they ostensibly possess a supersensitive means of divining price trends? As a consequence, do they have a better sense of direction in taking positions in the market which will yield profits in excess of those experienced by other traders?

If these firms make substantial gains, who absorbs the losses? Is it the general public? Where do the professional traders fit into this picture? Can one attain a degree of professionalism that will enable him to win consistently in speculative trading? How long does it take to reach this stage of perfection?

Speculative Ventures

The business of marketing is a necessary economic activity, and as such, it creates risks that are inherent in the process. Someone has to bear these risks. In doing so, they perform a necessary economic service. Our lawmakers should recognize that this is in the public interest and that it does not necessarily jeopardize innocent parties.

The major question is, who should bear these risks? In a free society, I suppose it's anyone's privilege. I have been laboring under the impression, however, that it is the amateurs who are paying the fiddlers. In my search for interviewees, I have looked in vain in the hinterland among the doctors, lawyers, merchants, and bankers for successful speculators. I have talked to several broker friends who have been honest in assuring me that 75 to 90 percent of their clients lose significantly and fade away. In apposition to this notion, do the professionals consistently make money and become wealthy in the futures market? If not, who is it that gets paid for performing this necessary economic service? I will be
FUTURES TRADING SEMINAR

content to let the theorists and the researchers answer this question.

FUTURES TRADING-ORIGIN, DEVELOPMENT AND PRESENT ECONOMIC STATUS

DISCUSSION

CHAIRMAN MUTTI: Well, Henry, that is a tremendous start for our seminar program. I particularly liked your conclusion indicating there are always problems to analyze and answers to seek, and I suspect some here in the audience have some questions.

DAHL: You have indicated that the origin of futures trading arises as a case of necessity in determining price. You also claim that you wouldn't be too surprised if many more commodities, if not all, will be traded in futures markets.

Will this come out of necessity or enlightened insight? If it is necessity, what do we mean by this? What kind of economic conditions will necessarily prevail?

In other words, why will we get more futures trading?

BAKKEN: The Europeans for example are evolving a common market. It is my theory that perfection in distribution should be sought in order to maximize production in such an economy. If the Europeans want their common market to proliferate and really succeed, they must have a much better market mechanism than they have at the present time. My first answer to your question is that I suspect that it will be brought about through necessity. They will be forced to adopt the most modern means of pricing and directing distribution.

We have been giving very close attention recently to the common market in Central America. Central American integration is really working very well, but they also need a better market mechanism, an organization that will get the maxi-
ORIGIN, DEVELOPMENT AND ECONOMIC STATUS

A specialist has just completed a study recommending a universal peso for all of the Central American countries. A common currency will remove one of the barriers to commercial intercourse in the Isthmus.

If we wanted to buy a Cadillac in 1945, 1946 or 1947 in this country, we had to do it on a contract to arrive basis. There were no Cadillacs on the sales floors at that time for deliveries, so we were forced, as a matter of necessity, if we wanted to ride in a Cadillac, to go to the agency and place an order and at the same time post a margin as a deposit.

This is one form of progress toward futures trading and away from the cash market. Historically, futures evolved in the same manner. The medieval merchants invented the bill of exchange. They evolved banking; they began dealing in futures markets themselves i.e., in contracts to arrive and contracts to deliver.

We have a credit economy; nearly everything is done on a credit basis; this is my basis for suggesting, as a horseback guess, that 90 percent of the transactions today in our economy are in stages four and five, contracts to arrive and contracts to deliver a form of futures transactions as well as in bona fide futures.

Why should we be spending all our time on the subject of marketing in classrooms describing what is going on in the cash market, when 90 percent of the show is in another area?

My answer is, that futures trading will evolve as a necessity, but I do have hopes that the economists may come forward and really do some theorizing on this form of trading. Maybe they can project their influence by aiding and assist-
FUTURES TRADING SEMINAR

ing the development in futures transactions, through their speculations.

GOLDBERG: The wheat economy seems to have been on a decline in the use of futures trading in the last few years; in fact, in the current year.

I noticed there were more hedging and pricing activities in the futures market in oats than wheat in one day here on the Chicago Board of Trade. It seems to me that the exporters — the group that handles 70 percent of the wheat in this country — don’t use the futures market very much.

Do you think that that is a factor in item four rather than five, or how do you explain it?

BAKKEN: They say that the four most important sellers of grain in export are Cargill, Continental Grain, Louis Dreyfus and Bunge. So far as I know from my interviews, these four say they hedged almost all of their transactions.

GOLDBERG: Well, can I put the question another way: If you were an exporter and you knew that the world market price was, say, $1.80 overseas, whether our wheat was $1.60 or $1.50 or $1.70, it wouldn’t make much difference to you, because the subsidy payment would make up the differential. Would you really be interested in a futures market?

BAKKEN: Well, P.L. 480 of course is a contract of the government, and you essentially have a hedge there in the government contract, but if you are in the free market, almost anything can happen in the export business. In talking with representatives from Continental, Cargill and Bunge, these corporations are dealing in PL 480 wheat and in some free wheat. Otherwise I am grossly mis-informed. Much of this so called “free wheat”, of course, is in the form of feed grain.

EHRICH: You said that the Chicago Board of Trade served for twenty years without hedging, but I understood Irwin in his “Evolution of Futures Trading” to say that the corn

[26]
ORIGIN, DEVELOPMENT AND ECONOMIC STATUS

trading, for example, developed in a sense from hedging; that is, the country buyer of corn needed cash during the winter when the rivers were frozen over, so he sold corn forward as a hedge to the buyers in Chicago, et cetera.

BAKKEN: You are referring to time contracts, I believe, which were actually speculative contracts. His main thesis was primarily based on the egg market. Hedging in corn occurred in the late 70's or early 80's. (Note: evidence on this point can be found on pp. 82-83 of Irwin's book — Evolution of Futures Trading)

EHRICH: What commodities were traded in futures in 1867?

BAKKEN: Wheat. (note: a check of the records reveals that corn, oats, rye and provisions were also traded in the period 1850-1859.)

EHRICH: There was no hedging in wheat until the 80's?

BAKKEN: That is correct, according to the record. I can't find any evidence of any hedging, because hedging, it is said, evolved sometime in the 80's. (note: refer to p. 83 Irwin's book)

EHRICH: In Irwin's book, I don't know whether he actually said "invariably", but futures markets tended to develop as a result of hedging — so this was my question.

BAKKEN: Well, Irwin, I suppose, was taking the textbook approach; that hedging is one of the prime functions of the futures market. This matter of price insurance of necessity evolved in time as futures matured.

Roger Gray is on the program this afternoon. He may take the opposite position from mine on hedging. This will be quite agreeable, because, then, we set up a basis for further investigation to determine who is right.

MUTTI: Well, in line with that last question and the discussion: Are you distinguishing between hedging on an or-
organized futures exchange and a means of shifting risk, which I think Ehrich is describing? He mentioned the forward sale. It doesn't need an organized market, and it's not the simultaneous cash-futures position.

EHRICH: Well, as a matter of fact, the development of the corn market supposedly came out of the first forward sale, stage four, and then these forward contracts became negotiable, and pretty soon, they organized or centralized the trading on the basis of hedging.

BAKKEN: That's right, but no hedging in corn occurred before the late 70's or early 80's.

MEIBURG: You mentioned that both parties don't necessarily gain on an exchange; one may lose or both may break even.

Does this necessarily hold if you compare the results with what would have happened had there been no exchange?

What I am saying is, that in an exchange, there may be a loss on one side and a profit on the other, but the loss or profit might not be as great. Why would a person willingly take a loss?

BAKKEN: You might go down on the floor of the exchange and ask one of these speculators that question?

MEIBURG: It's a willing transaction?

BAKKEN: Certainly, but don't confuse the trader with the ultimate user.

My wristwatch was purchased in Guatemala a couple of months ago because my old one played out on me. Did I lose or gain in this transaction?

I get a tremendous utility out of this watch. This is in the field of production economics. So I must have gained, even though I paid a much higher price than I should have for this watch.

If I were a dealer in watches, I might be a big loser. Or, if
ORIGIN, DEVELOPMENT AND ECONOMIC STATUS

I were a trader with a high priced contract for the watch, without the right to use the watch, I could be a loser.

Marketing, to me, is restricted to the business of negotiating contracts for the transfer of titles to the product.

My graduate students come to Chicago annually to visit the cash and futures markets. When these students enter the gallery, we have them take a position in the market. Then, we close them out of the market at the closing prices to see whether they have a loss or a profit.

I have never had a student that didn't either lose or win, in these pseudo transactions.

When it comes to the matter of transferring title to any goods, there may be unknown market opportunities somewhere in the field where one could have done better, so the amount by which he could have done better in a transaction is the amount which he lost in such transaction.

If you've got an exceptional bargain, you are the winner. The fellow who sold the goods failed to make the most of the situation because he didn't know other existing market opportunity.

SCHRUBEN: But seriously, Henry, it seems to me, that you are measuring whether one gains or loses only after a lapse of time.

Now, are you able to detect at the time of the transaction who is going to gain or who is going to lose? Can this be detected at the time of the transaction, and will the loser then at that time actually engage in the transaction?

BAKKEN: I have made deals, Leonard, and inquired afterwards what I could have done if I had been sane enough to wait, and inquire more intensively about my other opportunities.

This would be a simultaneous phenomenon. I was a loser in a particular transaction, because I acted too rashly, without
knowing the other market opportunities in the field.

A true test of the trade is in the market. You can gather all the information you feel is necessary about what the commodity is worth. You make a commitment and back it up with cash then, lo and behold! You find that you are wrong and you have lost money on the transaction.

SCHRUBEN: This is my point. You are measuring whether or not one gains or loses only after a lapse of time.

BAKKEN: There are two ways of determining losses and gains in the type of transaction we are discussing. One is simultaneous, the other is after a lapse of time, presumably when a successive transaction is consummated.

Relative to the simultaneous determination, any competent research agency could post a staff of well informed buyers in a wide market, for example, and determine the precise range of opportunities to buy a given commodity at an instant in time (say at 11:41.5 a.m. on March 24, 1966). These prices might then be compared with the actual price paid by a neophyte instructed in advance to go into the market and make the best buy possible of the same commodity at the time specified above. Allowance could even be calculated for transportation differences and other costs to reduce the opportunity transactions to a common denominator.

The second means of measuring gains or losses is through a subsequent transaction after a lapse of time. If one buys a commodity on Monday and sells it on Friday, the chances are, in a dynamic situation, that the price will have changed, and the subject will then know whether he has experienced a gain or loss. This means of measurement is not as precise or reliable as the simultaneous measurement because value has been added to or detracted from the commodity during the lapse of time. From a pure research point of view I would prefer the simultaneous means of determination.
ORIGIN, DEVELOPMENT AND ECONOMIC STATUS

HANSEN: It seems to me there is an anticipatory situation.

BAKKEN: Is this an aesthetic value you are talking about?

HANSEN: You never enter into a transaction where you think you are going to lose. You would be worse off —

BAKKEN: This is what the commerce schools have been teaching, and I say they are wrong.

SCHRUBEN: But I think you are comparing one criterion, whereas they are talking about another; therefore you are not actually talking about the same thing; therefore neither one of you necessarily has to be wrong.

BAKKEN: I believe they have broadened the field of marketing to include production economics, use, utilization, aesthetic matters and all the rest, hence all the confusion and no scientific approach.

ARTHUR: It seems to me I detect in these comments at least three definitions of gain and loss, and it might help us shorten our discussion if we can agree that these three categories should be distinguished. None of them relates to profits and losses over time, such as results from a purchase and subsequent resale.

The first one, which has hardly been mentioned, is the gain or loss in terms of the persuasiveness or pressure within the bargaining range, between the two parties to a transaction. There might be a gain or loss in terms of who has the greatest information, or influence.

The second one is the opportunity gain or loss represented by the difference between the price at which the transaction occurred and that which might be available to either party from other sources. (That is, they failed to find the best customer or the best bargain.)

The third meaning which I think confuses us involves the fact that in a futures marketing system dealing in contracts, the total of all of the gains and losses, both over time and
FUTURES TRADING SEMINAR

at any given time, resolve themselves at zero. Or, we can make this even more simply by saying that the exchange itself takes the opposite side of every transaction and carefully arranges it so that its net position comes out at zero over any period of time.

There is no net gain or loss over time within the carefully defined complex of the futures market itself. This may be an entirely different meaning than the one we are talking about in the two categories Henry and Leonard were discussing.

BAKKEN: I believe I could accept the definitions that you have suggested here in the matter of analysis.

GOLDBERG: Because of your background and your study of all the history and evolution of these programs, you must have some ideas as to how the futures markets can best be utilized in the future development of the marketing of agricultural commodities.

What is the environment that would make us utilize these markets to a greater extent and use them more effectively?

BAKKEN: This is a very interesting study in itself. I have suggested to some of my graduate students that they set down all of the criteria or requirements for the establishment of the futures market, and this makes a very interesting paper. Where can these markets be established? Under what conditions can they be established?

GOLDBERG: What I really meant was even those that are established, what change in the environment can improve the utilization of them?

The question I asked before was an attempt to try to find out how you think we can get around some of the hindrances to the use of this market?

BAKKEN: One of the big changes that could take place is to get the government out of the grain business. Some of
the fellows that I have interviewed think that we have reached the apex of governmental activity in the grain business; that we are now headed down the opposite slope, and that as they release the market to the enterprisers, that we will have more and more activity in the free market.

And if we have more and more activity in the free market, we will have increased volume of trading in futures.

I believe this is borne out in part by the extent to which trading is taking place on the Board of Trade. Volume has gone up tremendously, dollarwise. Fifty billion is a lot of money in one year.

ANDERSON: It seems to me, Henry, that you have minimized the importance of hedging to some extent in futures markets. And I wonder if you, in your viewing of these markets over time, feel that these markets can successfully function as a forward-pricing device without the support of traders or hedgers or people who are taking positions in the market with respect to some offsetting spot positions? He would not differentiate between the different forms of hedging, but simply the base of hedging in the market as a means of price discovery in a future period.

BAKKEN: Well, perhaps I have over-emphasized my protest against all the books that have been written in which the central theme is that futures markets exist for the purpose of hedging. I have been trying to point out that this is simply not true. Hedging is incidental to futures trading in that the main function of the futures is forward pricing.

ANDERSON: Really, my question is, do you feel they can accurately forward price without extensive participation by hedgers?

BAKKEN: Actually, if I were to restate your question, I would say do the hedgers perform any function in forward pricing? Do they express any judgment whatsoever in what
the price ought to be, and do they back it up with cash, and my answer is no.

ANDERSON: What about the anticipatory hedger? Don't you think he is expressing some judgment?

BAKKEN: Well, where he has no opposite position, he is a speculator during that time that he is participating, so he is in the position of the speculator, until he completes the hedge.

ANDERSON: The selective hedger is another one who, it seems to me, is expressing some judgment as to pricing.

BAKKEN: Then he is also in the category of the speculator during that period.

ANDERSON: Well, he is speculating in a spot, probably, but not in the futures market.

BAKKEN: You can speculate in the spot as well as the futures market.

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ORIGIN, DEVELOPMENT AND ECONOMIC STATUS

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**Demand**

1. Changing habits of consumption
2. Effective purchasing power
3. Customs and convenience
4. Wars
5. Available substitutes
6. Government regulations, etc.

**Supply**

1. Weather
2. Rate of flow to markets
3. Diseases and pests
4. Costs of production
5. Marketable supplies available
6. Quality of product
7. Tariffs
8. Government controls, pricing, etc.

Which blade does the cutting?