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# MAJOR TRANSACTIONS IN THE 1926 DECEMBER WHEAT FUTURE 

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## PREVIOUS STUDIES

This is the third of a series of studies relating primarily to largescale speculative trading in wheat futures. In this stride, as in the two earlier ones, the analysis has been limited to the trading on the Chicago Board of Trade where from 85 to 90 per cent of the transactions in grain futures are made and in particular where practically all of the large-scale speculative trading in wheat futures is done. Of the various grains traded in, wheat has in each case been selected because it has ranked foremost in speculative interest.
The first of these three studies covered the period from January 2 to April 18, 1925. The investigation was occasioned by the extreme and erratic fluctuations in wheat prices during this period causing general uncertainty in the grain trade. It was published as Senate Document No. 135 " under the general title of "Fluctuations in Wheat Futures."
The second study covered the period from April 19, 1925, to May 29, 1926, with particular emphasis on the 1926 May wheat future. It carried forward the previous analysis and covered a longer time, although a period during which price movements were less spectacuar. The results of this second study confirmed the conclusions

[^0]reached in Senate Document No. 135. The second report was published as Department Bulletin No. 1479, entitled "Speculative Transactions in the 1926 Miry Wheat Futurc."

The purpose of the present study, the third of the series, is to carry the analysis from June 1 to December 31, 1926. It presents an analysis of the operations of the leading speculators on the Chicago Board of Trade in which their trading is contrasted, (1) with the trading of a group of firms whose business is representative of small and medium-sized speculative traders; (2) with the trading represented by a group of hedging accounts; and (3) with the movements of whent-futures prices. The transactions discussed herein were primarily in the 1926 December future; however, transactions in the 1926 July and September and in the 1927 May futures have been included in order clearly to present the facts.

While these three studies vary somewhat in methods of analysis and in the number and type of accounts included, the most important sections are sufficiently similar to allow the reader to obtain one continuous picture of the entire period. Taken together, they extend over a period of tho years, from January 2, 1925, to December 31, 1926.

## EXPLANATION OF TERMS

Many of the terms used by the grain trade, and especially those pertaining to transactions in grain futures, are distinctly technical in charactrr. For the sake of exactness and brevity these techaical terms, along with some others, have been used throughout this report. Inasmuch as some readers will not be familiar with the meaning of all of tbese technical terms, a brief description of the more important ones is given herewith.

## ROUND LOTS AND JOB LOTS

Contracts to buy or sell must cover quantities of 5,000 bushels or multiples thereof if the price is to be registered as an official quotation. Such trades are commoniy known as round lots; whereas, quantities of less than 5,000 bushels are known as job lots. Prices on job lots are not registered as official quotations. Purchases of job lots are usually at one-eighth cent above and sales at one-eighth cent below the prevailing market price as determined by transactions in round lots.

## LONG AND SHORT

A trader who buys 5 December wheat, meaning a contract covering 5,000 bushels of the December wheat future, immediately assumes a "long" position, provided that he had no interest in the market, that is, was "even" at the time he made his purchase. In otner words, he "bought for long account" and is "long" 5 December. Similarly, if his transaction were a sale instead of a parchase, i. e., "sold for short account" he would then be "short" 5 December.

During a single day a trader might buy 50 December wheat and likewise sell 25 December, thus leaving him "net long" or "long" 25,000 bushels at the close of the market. Should his purchases exceed his sales over a period of several days or weeks to the extent

[^1]that his "long" holdings were continuelly increasing, he would be in the position of "accumulating a long line." Similarly, if his sales exceeded his purchases to the extent that his "short" holdings were continually increasing, he would be "accumuinting a short line."

## AGGREGATE LONG AND AGGREGATE SHORT

A commission house has many customers. Somo are buyers, and others are sellers. $\Lambda$ t the close of the market each day some of these customers will be "long," some "short," and others "even." Taking the totel of all "long" accounts gives the "aggregate long." Likewise, the total of all "short" accounts gives the "aggregate short." The difference between those two would represent the "aggregate net long" or the "aggregate net short." For example, the open contracts of the customers who were long might total $4,500,000$ bushels and for those short $5,000,000$ bushels, thus learing an "aggregate net short" position of 500,000 bushels.

In any special group of traders, be they speculators, hedgers, or scalpers, some will be "long" and others "short." For example, in this bulletin special reference is made to the transactions and market positions of 42 speculators. Of these, 20 might be in the market on the long side sud would be known as "longs," 15 might be in the market on the short side and would be known us "shorts." The remaining 7 at a particular period might have no position in the market, or be "even." On the other hand, some of the 7 might be "long" in September wheat, with an equal quantity "short" in December wheat, and their market position, when all futures are combined, would likewise be considered as "even." Let us assume that the aggregate of the 20 long accounts totaled $12,000,000$ bushels and the aggregate of the 15 short accounts totaled $10,000,000$ bushels. The "combined net position" of this group of 42 traders including the 7 who were cven, would therefore be $2,000,000$ bushels long.

## OPEN COMMITMENTS, OREN CONTRACTS, OR OPEN INTEREST

A trader who has no interest in the market at the beginning of a trading session and who buys during the day 25 December wheat and makes no other trades on that day, closes the day's business with "open commitments" aggregating 25 "long" December.
The open commitments or open interest in ench future for the market as a whole on the "long" side must of course be equal to the open commitments on the "short" side. In other words, every time one trader buys 5 December whent another trader must likewise sell 5 December. In this report the "total open commitments" applies to one side only, that is, does not include the contracts open on the "long" side combined with the contracts open on the "short" side.

LIqUIDATION AND COVERING
A trader who has a long position in the market eventually closes his contract by solling the same quantity of the same future, or by taking delivery of the actual grain sometime during the delivery montiu specified, the actual date of delivery being optional with the seller. Only a fraction of 1 per cent of the contracts are satisfied by delivery, the great majority being closed by transactions in the "pit."

When a "long" closes his contracts by selling in the pit he liquidates his holdings. Generally, however, "liquidation" applies to the elosing of long accounts on a declining market in an effort to save profits or to prevent further losses, whereas the elosing of long accounts on an advancing market is spoken of as "taking profits." In either of these cases, the transactions represent "selling for long account."

A short interest in the market is closed by making delivery or by buying an equal quantity of the same future in the pit. The latter is known as "covering" or "short covering." The closing of short trades on an advancing market to prevent further losses is often referred to as "forced to cover" or "running to cover." Such purchases represent "buying for short account."

## - Spreading

The buying of futures in one market and at the same time selling an equal puantity in another market is lonown as "spreading." It also applies to transactions covering the purchase of one future and the selling of another future in the same market or in a different market. Spreading transactions may also be made between grains, such as the buying of a wheat future and the selling of a corn future. Persons who make a practice of this character of trading are commonly known as "spreaders."

BULIS AND BEAS:
These terms are probably well understood. A "bull" is a buyer, a booster, or one who believes that higher prices are to prevail. A "bear" holds the opposite view and sells in anticipation of lower prices.

## prices and teading during the summer and fall of 1926

Whent prices during the summer and fall of 1926 were more stable than during the same periods in 1924 and 1925. The two earlier years were characterized by pronounced price swings. During the seren-month period from June to December, 1924, the December future rose from a low of $\$ 1.071 / 4$ on June 3 to a high of $\$ 1.791 / 2$ on December 27 , having a total price range for the period of $721 / 4$ cents. During the year 1925 for the same period December wheat declined from a high point of $\$ 1.70$ on June 5 to a low of $\$ 1.33$ on October 3, and then turned upward to a final high of $\$ 1.871 / 2$ on December 31, with a range of $54 \frac{1}{2}$ cents. The range for each of these years was large, especially when compared with the range during the same period in 1926. The high price for the 1926 December wheat future was $\$ 1.50 \frac{1}{4}$, on July 19, and the low price was $\$ 1.32$, on December 31 . The range was $181 / 4$ cents.

A widely fluctuating market attracts speculative traders and especially public participation, while a market of small price movements discourages speculation. The price range was somewhat smaller during the latter half of 1926 than during the corresponding periods in 1924 and 1925. This suggests that the last seven months of 1926 was a less attractive speculative period than the corresponding periods in 1924 and 1925. This is clearly shown in Table 1.

Table 1.-Average daily price fluctuations compared with the volume of trading and oven commitments, for wheat futures, for the seven-month period from June 1, to December 31, in 1928, 1924, 1925, and 1926

| Average daily | 7-thouth treriot, June to December |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1923 | 192.1 | 1025 | 1928 |
| Volume of trading (all futures), bushels- | 25,293,000 | 44, 293,000 | 56, 489,000 | 39, 687,000 |
| Open commitments (all futures), bushels | 103, 857,000 | 104, 300, 0000 | 103, 723,60 | 4H, 489, 130 |
| Range in jrice (donfuant fature), cents. | $1 \frac{1}{19}$ | 4 |  | 1/8 |

I Average for the period July 0 to Dec. 31, 1523; no eartler data arailable.
Table 1 gives the ayerage daily price range for the seven-month period from June to December for the years 1923, 1924, 1925, and 1926. It will be seen that in 1924 and 1925 the average daily price ange was cousiderably larger than in 1926. Similarly, the average taily volume of trading in all futures was larger for these periods, ad, to a more limited degree, the average daily open commitments, e., customers' future contracts open on the books of clearing firms at the close of each day's trading. As compared with the year 1923 , however, 1926 shows a laryer average daily price movement and likewise a larger volume of trading and open commitments. The summer and fall of 1926 constituted therefore on the whole a period of medium price fluctuation, volume of trading, and open commitments.
Figures 1 and 2 have been prepared to give a comprehensive picture of the price movements, the volume of trading, and the open commitments during the summer and fall of 1920 . The price datio for these charta will be found in Tables 2 and 3 of the Appendix. The charts present, by days, the course of prices, the volume of trading, and the open commitments in wheat futures for the Chicago Board of Trade.
Figure 1 shows only the 1926 December future. This future has beea chosen for separate study because, for this particular period of the year, it is relacively the most importani.
Trading on the Chicago Board of Trade is carried on mainly in four different futures-July, September, December, and May. At certain periods of the year each of these fourfutures becomes relatively the most important as a trading medium. Their relative importance can be measured either by the volume of trading done in each future from day to day or by the relative quantity of open contracts in each future each day. In the present analysis, as in previous studies made by the Grain Futures Administration the open commitments have been used to measure the period during which each future is the mostrimportant, i. e., its period of dominance.
Table 2.-The period of dominance of each of the various wheat futures during the year 1926


It will be seen from Table 2, that, during the period covered by this study, the 1926 December future was more important over a longer period of time than any one of the other futures. ${ }^{4}$ In a subsequent section materinl presented concerning the trading during this period will show that the December future also included most of the large speculative trades of the period. For theso reasons the December future has been chosen for separate analysis.

Regular trading began in the 1926 December future on May 5, the market that day closing at $\$ 1.37 \%$. Prices remained at about this figure until June 29 , when they began to advance, reaching a high of $\$ 1.501 / 4$ for the life of the future on July 19 . From this top a swing downward of 18 cents occurred, a proliminary low price of $\$ 1.321 / 4$ being reached on September 4. The price then gradually moved higher until Oetober 23 , when it reached $\$ 1.463 / \mathrm{s}$. It then turned downward to n new low of $\$ 1.321 / \mathrm{s}$ on November 19. From this point on, the price trend was fairly regular, making two minor swing and reaching a final low price for the life of the future of $\$ 1.320$ December 31, the dite on which the future expired. Open commi ments and the daily volume of trading in this future assumed rel tively large proportions from the latter part of August until the latte part of November.

Figure 2 throws some additional light upon the price movement and the volume of trading of this period. It starts with April 30 and continues through December 31, 1926. Beginning with April 30 which was the day on which the July future became dominant, price are shown by successive segments of each future, each being shown fo the period during which it was relatively the most important-i. e. during its period of dominance.

The volume of trading is shown both by futures and for all future combined. The open commitments are shown for all futures form bined. As they are showa on a daily basis, one can trace the direct relation between the daily volume of trading during this period and the daily runge in price. Days baving a large volume of trading are usually days with a large price range, in some intances the prico moving upward for the day and in others downward.

Similarly, ono can compare by days the relation between the total of the open commitments and the corresponding price movement. As an example, it will be scen from Figure 2 that during August there was a large increase in the total of open contracts. During this same period prices declined, which shows that short selling was a more powerful market factor than the buying for long account. Earlier studies showed that prices frequently move directly with the trading of harge-scale speculators. It might tnerefore be assumed that the short selling of this period was done principally by the leading speculators. From early September to early October prices adyanced, while the total of the open commitments decreased, showifig that the prices for this period were more responsive to short covering than to new buying for long account, which suggests, that the large traders were covering a short position.

Such an analysis, however, groups all traders together and does not permit of separate study of each type of trader. What is needed is a broaking up of the transuctions making up the total volume of

[^2]


Figure 2 FOUND AT END of BULLETIN.
trading and of the positions long and short composing the total open commitments by classes of traders, so that one can examine the opera-- ions of each class with reference to price changes and to the trading -f each of the other classes. In so far as the information currently sceived by the Grain Futures Administration will permit, this has ween done in the sections following.

## MARKET POSITION OF 42 LARGE SPECULATIVE TRADERS COMPARED WITH PRICE

The clearing firms of the Chicago Board of Trade report daily to the Grain Futures Administration the total volume of trading and the aggregate of the open commitments of their customers. The latter is given as of the close of the market each day for both those who are long and those who are short. These reports are given by futures and by grains. Among the customers of a clearing firm there may be individual speculators who trade on a large scale; there may be included a large number of small speculators who venture to the extent of buying or selling 5,000 or 10,000 bushels; there may be scalpers who buy and sell large amounts during the day but who even up their market position cach day before the close of the session; there may be spreaders who buy in one market or future and sell an equal quantity in another; there may be hedging accounts representing the balancing trades of some mill or cash-grain firm; there may also be accounts of other firms, correspondents of the clenring firm, who in turn may have customers of varying types. The extent to which a clearing firm will bave accounts of these various classes will depend upon the size and character of business which it receives.
In addition to a report of the total of the open commitments covered by all accounts, cach clearing firm during 1926 was required to report daily the position of each separate account which equaled or exceeded a designated amount. For wheat this amount was 500,000 bushels in any one future. Some of these special accounts reported were for individual speculators trading on a large scale, some were hedging accounts of cash-grain firms, some were accounts of other commission houses being carried on the books of the clearing firm as a siugle account. This general description of the reports received by the Grain Futures Administration has been given in order to explain more clearly Figures 3 and 4 and others to be presented in later sections.

Figure 3 has been prepared from the special accounts of 500,000 bushels or over reported by clearing members. It shows, by dsys, the combined net position of all of the accounts of individual speculative traders reported by clearing firms from April 30 to December $31,1926$.
For all futures, there were 42 of these individual speculative traders, each of whom had a position in the market of 500,000 bushels or over in some one future. Fifteen of the 42 held a position of a half milition or more in only one of the four futures, 12 in two futures, 4 in three futures, and 11 in all four futures. The length of time each trader held a position of 500,000 bushels or over varied from 1 day to the entire period of 202 trading days. Some of these 42 speculators were long, while others were short. The curve representing the group as a whole, shown in Figure 3, is the net of the


Fig. 3.-Thenet position of 42 leding speculators of the Chicago Board of Trade, all whent futures combined, compared with the average closing price of that wheat future which at the time was relatively the most important, by days, for the period April 30 to December 31, 1920
aggregate of all of the long and of the aggregate of all of the short positions, all futures combined. The aggregate of ail of the long positions and the aggregate of all of the short positions, together with the net, is shown in Table 1 of the Appendix.

In Figure 3, in addition to the combine? net position in all whent futures of the 42 speculative traders, thero is presented the trend of the futures pricos covering the same period. The price curve is a composite of each of the four futures, the one used for each period being relatively the most important at the time. Both the netposition curve and the price curve are drawn on the block plan so that one may compare not only the course of trading with the course of prices for the period as a whole but also the change in net position occurring on individual days with the corresponding change in price.

As an example, on July 31, the combined net position of the 42 traders in all wheat futures was long $6,080,000$ bushels at the close of trading, while the price of the 1926 September wheat future elosed at $\$ 1.43 \%$. At the close of the market the following trading day, August 2, the combined net position of the 42 traders was short 535,000 bushols, while the 1926 September future closed at $\$ 1.3 .93 / 4$. The difforance between the two net-position figures gives the net trade of the 42 speculators on August 2. This net is represented by sales aggregating $6,615,000$ bushels. Similarly, the difference botwecn the two closing prices gives the net change in price on August 2, which was a declino of $41 / 8$ cents. The vertical bars in Figure 3, therefore, represent the net trades and the net changes in price occurring aach day.

The ligh degreo of relationslip between the net position of the 42 large speculative accounts and the price can be easily seen. Throughout the period of eight months, each major movement in the net position of the 42 traders had its counterpart in the movements in futures prices. As a rule, also, the high points and the low points of not only the major but also the minor net-position movements are closely duplicated in the price curve. Finally, when compared by individunl days, it will be readily seen that as a general rule on the days when the net trades are purchases, the net price changes are upward; while on days on which the net trades are sales, the net changes in price are downward.

To measure quantitatively the exact relation between these two curves, a correlation coefficient has been employed. The net position of the 42 speculative traders correlated with the closing price of the dominant future for this period of 202 trading days resulted in a direct correlation of +0.71 where a perfect relationship would be represented by a +1.00 , and a complete lack of relationship by a 0.00 .

Figure 4 shows a comparison of the changes in price and net position from day to day for the 1926 December future only. Of the 42 speculative traders whose dairy net position in all futures combined is shown in Figure 3, only 32 held a position of 500,000 bushels or more in the December future. The net position curve in Figure 4 shows the combined position for these 32 traders, and it is compared by days with the price curve of the 1926 December future.
It will be seen that from the early part of August until the latter part of November, essentially the same picture is presented in Figure 4 as in Figure 3. In other words, the outstanding net trades made

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$$



## wheat future

during this poriod wero in the Decomber future, and they are fully retlected in both charts. Prior to August aud during December, only a small portion of the combined position of all of the lirge speculative traders was in the 1926 Docember future, and consequently the netposition curve over these periods shows little correspondence with the price. The proper comparison to bo made prior to August is the trading and price changes in the July and September futures, and for December the trading and price changes in the 1927 May future.

Figure 4, representing only the 1926 Decomber wheat future, shows to a large extent the reasons for the market changes from August to Novembor. Figuro 3 supplements and enlarges the picture by showing the 1926 July, the 1926 September, and the 1927 May future combined with the Decomber future. It compares the combined figures with the price of the approprinte future: This mnses $n$ completo survey over an eight-month peried, showing the combined operations of all of the leading speculators. The results show a remarkable correspondence in movement between the net-position changes and the net-prico changes, whether the comparison is made for major movoments, for minor movernents, or for individual days.

## NET POSITION OF SMALL TRADERS COMPARED WITH PRICE

In the enrice bulletin entitled "Speculative Transactions in the 1926 May Whent Future" a compilation was made showing the combined net position of 15 clearing firms of the Chicago Board of Trade. The 15 firms were selected from a total of 135 clearing firms. Each of the 15 firms solected was known to have a clientelo consisting mainly of small and medium-sized speculative traders. All of the houses handling the busiuess of the leading speculators of the market wero avoided, as well as those houses known to be directly connected to any considarable extent with the cash-graim business.

Tho trading of the customers of those 15 clearing firms was contrasted with the transactions of the large traders and with the changes in price. Eikewise, the not position of these 15 firms was compiled for tho 1926 May whont future and compared with the May fituro price by days from October 22, 1925, to and incuding April 29, 1926, the period during which this purticular future was relatively the most important. The comparison shows an inverse relationship of net position to price throughout the period, the correlation figure being -0.74 .

A similar analysis has been made for the present study covering the period from April 30 to December 31, 1926. The transactions of the same 15 firms have been used, but instead of one future being used, all futuros havo been combined to obtain the net-position data, nod a composite of all four futures has been used for the price series.

Figure 5 shows the results of this analysis in graphic form, the detailed dataz being recorded in Table 1 of the Appendix. In addition to the combined net position of the 15 clearing firms and the composite price, Figure 5 reproduces, for comparative purposes, the netposition curve of the 42 large speculators already shown in Figure 3.

An interesting fact brought out by Figure 5 is that an inverso relation ovidently exists between tho transactions of small and medium-sized traders, as indicated by the curvo representing the trading of the 15 elearing firms, and that of the 42 large-scale speculative traders, as
indicated by the curva representing their combined transactions. It is oven more important, however, to bear in miud the fact that for overy purchase tbere is also a sale. If one group in the market is heavily short, some othor group or groups must hold an equal

amount on the long side. In the operations of the leading speculators on the Chicago Board of Trade, the opposite rolle falls largely to the small or medium-sized traders, usually referred to as the "gonoral public."

Of greater signifiennce is the fact that the combined net position of the 15 firms moved in the direction opposite to that of the price movement. The extent to which this is true, when measured statisticully, is represonted by an inverse correlation of -0.83 . Expressed difterently, on days during which the price advanced, small traders generally sold more than they bought, and on days during which the price declined small and medium-sized traders generally bought more than they sold. This observation is the result of three anatyses, ${ }^{5}$ covering a period of two years and including periods of unusual as woll as periods of usual market activity.

This inverso relationship of price to the trading of smah and medium-sized speculators is somewhat at variance with popular idens regarding the trading methods of this group. This type of trader is generally considered a bull entering the market on the long side by buying. One would expect him to buy when the market is strong with considerable promise of an upward movement. Even more, ono would expect, and it is quite gencrally held, that with each reaction in prico a so-called "shako-out" of the small and financially weak takes place, this liquidation consisting of hurried selling as the price declines.

Figure 5 shows that, taken as a group, this type of trader does just tho opposito. On days when prices are rising, this class sells more than it buys; and on days of falling prices, it buys more than it solls. Furthermore, the results are based upon a sufficiently large sample to be fairly conclusive. Sume other explanation is therefore necessary.

If the explanation is to bo found, ene will need to observe what takes place within each trading daj. In this bulletin, as well as in previous studies, each trading day has been treated as a wnit, purchases and sales being combined as a net for the day and changes in market position being measured by taking daily cross sections as of the elose of trading. This sorves to tell what has happened for the day as a whole and from day to day or week to week, but it is not sufficiontly detailed 'to give the trading, the changes in market position, and the changes in price within ench day.

To make an intraday study of a large enough sample to be representative of all of the traders on the market would require considerable work. Such a detailed study, which would add greatly to our knowledge of future trading, must therefore be deferred for future consideration. It is evident, however, that if the purchnses and sales, and the changes in market position of each of a considerablo number of small traders were tabulated and classified, it would then be possible to see just how each individual or subgroup acted under the pressure of price movement. For example, on a day in which the price advanced 4 cents one could classify the small-scale traders into a number of groups: (1) Those who limited their losses by buying to cover a short position; (2) those who took profits by selling to close out a long position; (3) those who bought to acquire a long position expecting the price to continue its upward course; and (4) those who sold short, thinking the upward movement a "bulge" in the market and expecting monentarily a downward renction. One could also

[^3]elassify these tyaders by tho longth of time and amount of price movemont required to induce them to act.

Perhaps it would bo found that on days of upward price movement those who wero short would quickly cover by buying and others would buy to acquire a long position, but that, as the price continued to riso, sentiment changed and selling doveloped in considernble volume, either in the taking of profits on long holdings or in short salling in the hope of a reaction in price movement. Similarly, on day's during which the price broke rapidly, it might be found that Iate buying ou an assumed "broak" in prices, torether with the taking of prolits, more than counterbalanced earlior short selling and solling to stop losses on long holdings. This is one possibe explanation of the fact that on days when tho price declines, tho smafl and mediun-sized traders, taken as a group, buy more than they sell; and on days when the price increases, the traders of this same class sell more than they buy.

It should not be inferred from the inverse relationship, whatever the explanation may bo, that the small and medium-sized traders are as a group generally woong and lose money in their trading; nor should one conclude that they aro generaliy right and profit thereby. In the absence of specific pries data giving the purchase price and sales price of each trade, it is impossible to tell what the probable profits or losses for the group were at any time or for any period ol tinme. This is equally true of the operations of other groups analyzed in this study.

Certain it is that for the day as a whole and from day to day the trading of this group is not the direct and immediate cause of price changes, Rather its trading seems to act in response to changes in price, although a knowledge of the forees at work causing it to so act awnits a further and more minute analysis.

## NET POSITION OF 22 HEDGING ACCOUNTS COMPARED WITH PRICE

In an attempt to determine the character of future trading for hedging purposes and how it is rolated to price and to the trading of other groups, an analysis has been made of 22 hedging accounts for the poriod covered by this bulletin. These 22 accounts were reported to the Grain Futures Administration by the cloaring firms of the Chicago Board of Trade and include all of the accounts that could be definitely identified as purely hedging in character. They belong to the class of special accounts described in an earlier section, being reported only when they had a position in any one future of at least 500,000 bushels. While the number of accounts ineluded in this list is small, each account is large so that when combined they aggregate a considerable share of the total hedging position during this period.

Figure 6 shows the combined net position of these 22 hedging accounts from day to day, the data for this chart being found in Table 1 of the appendix. The chat shows not only the net position but also the argregate of the long accounts and the aggregate of the short accounts throughout the period. The composite price curve is shown for comparative purposes. In connection with figure 6, it is of interest to noto in the first place that the net position of this group
 ate long, the aggregate short, and the net position of 22 large hedging accounts, all wheat futures combined, compared with the
of hedging accounts was long throughout the major portion of the period. One would expect during this period of the year that the accounts taken together would have a short position of considerable sizc. It is generally held that during the late summer and fall, when the wheat crop is moving freely, the large purchases of actual grain and the accumulation of stocks are accompanied by heavy selling of futures for hedging purposes. This was the case in 1925 and to a more limited degree in 1923 and 1924.

The reverse apparently held true in 1926. Tho explanation is to be found mainly in the unusually large forward sales of flour made during this period but in part also in the very brisk export demand for wheat. In the milling industry so large were their forward sales in the late summer and fall of 1926 that the sales of four exceeded the cash-grain purchases by a large margin. This required heavy purchases of futures as a bedge.

Table 3, which has been prepared from reports of the Millers' National Federatiou, shows the pronounced change in the hodging requirements of mills for the years 1925 and 1926.

Table 3.-The combined aggregate long, the combined aggregate short, and the combined net fuhres position of all mills reporting to the Millers' National Federaftun, for specificed dates daring 1025 and $19 \approx 6$

| Dato | ${ }^{\text {Agsregata }}$ thititures |  | Nut fatures pasition |  |
| :---: | :---: | :---: | :---: | :---: |
|  | L.ong | Short | Lons | Short |
| 1935 |  |  |  |  |
| Jutye 30 |  |  |  |  |
| ${ }_{1020}$ |  |  |  |  |
|  |  | 10:50, 5 |  |  |
|  |  | 0, 178,000 |  |  |

Theso figures do not include all mills, the reports being from mills manufncturing between 50 and 60 per cent of the total flour output for the United States. They are, however, representative. They show a marked change in position from the short side of the market during 1925 (due to the fact that the wheat stocks carxied were Iarger than forward sales of flour) to the long side of the market in 1926 (due to the fact that forward sales of four greatly exceeded wheat supplies purchased). The aggregate long position of $35,123,000$ bushels and the aggregnte short position of $9,398,000$ bushels on September 30, 1926, is surprisingly large in view of the fact that the total of open commitments in wheat futures for that date, one side only, was $96,225,000$, tushels.

Of the 22 hedging accounts, as charted in Figure 6, those showing a long position aggregate $17,686,000$ bushels, and those showing a short position aggregate $8,089,000$ bushels on that same date, September 30, 1926. Of these 22 hedging accounts, 11 were long accounts during the major part of the period, and 11 were short. Five of the accounts were those of milling companies; others were accounts representing a combination of grain and milling business.

The exact extent to which the position of these 22 hedging accounts reflected the position of the milling industry can not be definitely measured, although it is known that a considerable portion of the combined net position came from this source.
In addition to the fact that this group of 22 hedging accounts was net long throughout the major portion of the period, as shown in Figure 6, it should be observed that the course of their market. position is not directly related to the futures price. Instead, it moves opposite, in general, to the movements in price, having an inverse correlation of -0.67 for the period. In partjcular, during the downward price swing in August, the net long position of the hedging accomits increased rapidly, serving as a makel support. In this it was similar to the movement representing the transactions of the small and medium sized traders shown in the curve of the 15 clearing firms. Certainly for this season the downward movements in price wern not caused by hedging pressure so frequently mentioned in the "trade gossip" as having a depressing inlluence on prices.

## Importance of five leading speculators

The transartions of three classes of traders have thus far been presented, each in turn being compared with the movements in price. It has been found that the net position of one of these chasses, the one composed of 42 large speculative traders, correlates directly with the price, the movements in net position from day to day having their counterpart in the day-to-day changes in price. The net position of each of the other two classes, the small or medium sized speculative traders and the 22 hedging accounts, correlate inversely to price, the movements in net position from day to day being opposite to the corresponding movements in price.

There are two other groups of traders which should be mentionedspreaders and scalpers. Spreaders are at times a market factor of importance, although previous investigntions indicate that as a group their operations are neither as significaut nor as large as is generally supposed. Scalpers, or those who primarily confine their operations to buying and selling equal quantities within a trading day, closing even or practically so, are an important class in intraday trading. In this bulletin, howerer, prices and trading are considered only as they change from day to day, and no attempt has been made to determine the influence of trading by scalpers or other intradny transactions.

Of the various classes of traders, therefore, the one which is directly related to price movements is the group of 42 large-scale speculators. The operations of fire of these 42 speculators stand out as far more important than those of the others and will be further analyzed in the three sections following.

## NET POGITION OF FIVE LEADING SPECULATORS

Figure 7 has been prepared to show the combined net position of these five leading speculators in all futures and, in turn, to compare the course of their market position with the trend of futures prices. These five traders have been designated for analysis in this bulletin as traders $A, B, C, D$, and $E$, arranged in the order of the size of their

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$$



Fic. 7.-The net position of flve leading speculators of the Chicago Board of Trade, all wheat futures combined, compared with the average closing price of that wheat future which at the time was relatively the most important, by days, for the period A pril 30 to December 31, 1920

market position during this period. Ench of the five had a net position of over $2,000,000$ bushels in wheat futures at some time during the period covered. These five were the only speculative traders having a market position of this size. Four of these five tradors hud a market position of $2,000,000$ bushels or more in the 1926 December future, trader E reaching the 2,000,000-bushel level in only the 1926 . September future. The combined net position of the four traders for the December future, together with the 1926 December price curve, is shown in Figure 8 .

It can be seen from Figures 7 and 8 , for the period in which the December future was of najor inportance, that the position of these leading traders is related directly to the price to a high degree. By referring to Digures 3 and 7 it will be seen that the curve of the combined net position of the $\overline{5}$ traders closely resembles the curve representing the combined net position of the 42 speculative traders. The position of the latter group shows a direct correlation with the composite price curve of +0.71 , while the position of the group of five traders shows a direct correlation of +0.72 .

Whe reason why the position of these 5 traders so closely resembles that of the 42 is beause tio other 37 usually were in the market for only a short time. Likewise, whenever the 37 were in the manket their position was much smaller and much less consistent. The transactions of the 37 traders, as a group, show no definite relation to the futures price for this period.

The direct relation between the operations of large-scale specuiators and price is thas limited to five leading traders. In an enrlier report ${ }^{8}$ there were eight such leading traders, each having a position of at lenst $2,000,000$ busbels. In the bulletin covering the Speculative Transactions in the 1920 May Wheat Future, there were also only eight " 2 -million-busbel-nr-over" traders.

The markot position of each of the five leading traders, as covered in this report, has been compiled by futures and is shown in Table 2 of the Appendix. Figures 9 and 10 show the position of each in chart form; Figure 9 for all futures combined, and Figure 10 for the 1926 Decomber future only.
It will be seen from these two charts that traders A and B in particular held unusually large lines. Trader A reached a maximum position of $12,545,000$ bushels short on September 8, all but 200,000 of which was in the 1926 December future. Trader B on this same date held a maximum position of $10,250,000$ bushels short, all in the 1926 December future. Together the two traders had on this date a short position of $22,795,000$ bushels, all but 200,000 of which wes in the 1926 December wheat future. This short selling evidently exerted a very heavy pressure on prices at the very time when farmers were marketing heavily. Their holdings amounted to 21.4 per cent of the total open commitments in all futures (one side only) at the close of the market that day end to 32.6 per cent of the total of open commitmonts in the 1926 December wheat future, which also carried most of the current hedges.

While the market holdings of traders C, D, and E appear small beside those of traders A and B , they were far from small when compared with the market positions of hundreds of averaged-sized traders.

[^4]Trader C reached a maximum position, in sll futures combined, of 4,875,000 bushels short on May 21, trader D reached a maximum of $2,950,000$ long on June 26, while trader E reached a maximum of $2,200,000$ long on July 20.


Reference should be made also to the combined position of these five traders compared with the total open commitments for the market. For all futures combined they averaged for the entire period, April 30 to December 31, 3.3 per cent of the total open com-
mitments on the long side of the markot and 10.5 per cent of the total on the short side. For the December future only they averaged for the long side of 1.6 per cent of the total open commitments and 12 por cent of the total for the short side. On iudividual days the com-

bined position of the five, of course, amounted to considerably larger fractions of the total, the largest percentages being on June 3 and from September 2 to September 10, inclusive, days on which the proportion of tho aggregate of the short positions amounted to over 20 per cent
of tho total. There were no days on which their aggregate long commitments amounted to as much as 20 per cent of the total open commitments.

## NET Trades of fiye meading speculators

In tho preceding section the market positions of the five leading speculators were given and compred with the price. The block plan of presentation was used so that one might compare not only the course of trading throughout the period with the coruse of prices butalso the changes taking phace on each individual day. In this section a tabulation and classifiention is made of these individualday changes in market position with a comparison of the corresponding price changes from day to day.

The change in the net position of a trader from the close of trading on ono day to the close of trading the following day constitutes the net trado of that trader durng the latter day. To illustrate: At the close of the market on July 31, trader A was long 990,000 bushels in the 1926 Soptembor future and long $1,240,000$ bushois in the 1926 December future. This is shown in Table 2 of the Appendix. At the close of the market on the following trading day, August 2, this trader was short $1,610,000$ bushels in the 1926 September future and remained long $1,240,000$ bushels in the 1926 December future. His net trados lor August 2 were, therefore, sales aggregating 2,600,000 bushels in the September future, with nothing for the December.

A not trade on a single day, such as the illustration of the sale of $2,600,000$ bushels, is of course not a sale made at one particular time within the day but instead is likely to consist of sales (or in some instances the net of purchases and sales) made at different times during the day.

The net trades may thus be obtained for each day, by futures and by traders, or be combined for all futures and for all traders. Similarly the smount the futures price moved to correspond to the net trade is the difference between the closing price of one day and the closing price the following day, called the net change in price.

Table 4.-The days on which five speculative traders made purchases or sales io a net amount of 000,000 bushels or more in wheat futures, together with the net change in futures prices, from June 1, to December 31, 1926

| Date | Trader | 1020 July future |  | $1928 \underset{\substack{\text { Sature } \\ \text { September }}}{ }$ |  | 1984 Decamber |  | Net pur. chases of salas, all futures combined ${ }^{2}$ | Net price. change <br> (domi- <br> $\underset{\text { natars }}{\text { nant }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Net purchases or sales $:$ | Net micice change' | Net purchises or sules: | Net price change' | Net purchases or stics ${ }^{3}$ | Net price conge : |  |  |
| June 1. | A |  | Centr | t,000 bush. | Cents | $\begin{aligned} & 1,000 \\ & \text { bush. } \end{aligned}$ | Cents | ${ }^{\text {b }}$, 0000 | Cents |
| Nel | B | +850 +350 |  |  |  |  |  |  |  |
| June 2 | D | +510 | -il\% |  |  |  |  | $+510$ | -186 |
| June 3. | $\stackrel{\text { A }}{ }$ | - -300 |  |  |  |  |  |  |  |
| Do | 1 | +735 |  |  |  |  |  |  |  |
|  |  | -3, 305 | +13 |  |  |  |  | -3, 3 ¢5-5 | 姑家 |

[^5]Table 4.-The days on which five speculative traders made purchases or sales to a net amount of 000,000 bushels or more in wheal futures, together with the net change in future prices, from June 1, to December 31, 1926-Continued

| Date | Trader | 1926 July future |  | ${ }^{3726} \begin{gathered}\text { Septernber } \\ \text { liture }\end{gathered}$ |  | ${ }_{\substack{1928 \\ \text { futura } \\ \text { fecamber }}}$ |  |  | Nel prico change nantmiture |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Net nar salley | Net prico | Net pur- chnses or silces | Net price | Net pur- chases or sales | $\begin{aligned} & \text { Net prive } \\ & \text { change } \end{aligned}$ |  |  |
|  | ${ }_{\text {E }}$ | $\begin{aligned} & 1,000 \\ & b u s t i b l \\ & +1,500 \\ & +1,500 \\ & +1,000 \end{aligned}$ | Cents | t.000 | Cents | foct | Cents | \%,000 | Cents |
| Not.-- |  |  | + 16 |  |  |  |  | +1,000 | +1/2 |
| 1005 5. | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~B} \\ & \mathrm{C} \\ & \mathrm{D} \end{aligned}$ |  |  |  |  |  |  |  |  |
| Do |  |  |  |  |  |  |  |  |  |
| Net-- |  |  | +27 | +is0 | +2 |  |  | +5, fis 5 | +23/4 |
| Juva 7 | $\stackrel{\mathrm{A}}{\mathrm{~d}}$ |  |  | $\xrightarrow{1,525}$ |  |  |  |  |  |
| Do. |  |  |  |  |  |  |  |  |  |
| Nat.... |  |  | + 6 | +3,525 | + H \% |  |  | +3, 325 | +8 |
| $\xrightarrow{\text { June } 0 .}$ | $\stackrel{\circ}{\mathrm{D}}$ |  |  |  |  |  |  |  |  |
| Net.-- |  |  | -3/ |  |  |  |  | $-88$ | -3/6 |
| June 10. | $\begin{aligned} & \mathrm{o} \\ & \underset{\mathrm{D}}{\mathrm{D}} \end{aligned}$ |  |  | +500 |  |  |  |  |  |
| Do. |  |  |  |  |  |  |  |  |  |
|  |  |  | -216 | $+500$ | -13/4 |  |  |  | ....-.... |
| Juae 12 | $\begin{aligned} & \mathrm{A} \\ & \stackrel{\mathrm{C}}{\mathrm{E}} \\ & \stackrel{\mathrm{D}}{ } \end{aligned}$ | $\begin{array}{r} +300 \\ -3,695 \\ -+690 \\ +7.750 \\ -1.850 \end{array}$ |  |  |  |  |  |  |  |
| Do. |  |  |  |  |  |  |  |  |  |
| Not... |  |  | 134 |  |  |  |  | -1,890 | 込 |
| June 15 | c | $+1,030$ | +134 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| ${ }^{\text {dube }}$ |  | +1,100 |  |  |  |  |  |  |  |
| qt. |  | $+1.100$ | + 3 | $-500$ | 0 |  |  | 7000 | +1/8 |
| fune 22 | A <br> A <br> D |  | -36 | $-190$ | 0 |  |  | - | -1/ |
| su09 23 |  | $-1,500$ | , |  |  |  |  | -1, 700 | -20 |
| Juna 30 | ${ }_{\text {c }}$ |  |  | -1,200 |  |  |  |  |  |
| Net. |  |  |  | $+1,650$ +450 |  |  |  |  |  |
| July ${ }^{\text {a }}$ | $\begin{aligned} & A \\ & \underset{B}{A} \end{aligned}$ | +2,200 |  | +1,200 |  |  |  |  |  |
| Do |  |  |  | +500 |  |  |  |  |  |
| , |  | +2300 | + | +200 | +2\% |  |  | +2,200 | +2\% |
| July 6 , | ${ }_{1}$ | +1,200 |  |  |  |  |  |  |  |
| Net. |  | +1, 100 | +285 |  |  | $\begin{aligned} & +1,000 \\ & +1,000 \end{aligned}$ | $+23 /$ | +2,200 | +2/8 |
| July 8 - | ¢ |  |  | -600 |  |  |  |  |  |
| Juy 10. |  |  |  | $-900$ | -7 |  |  | -000 | -76 |
| July 13 | $\begin{aligned} & \mathrm{A} \\ & \mathrm{O} \\ & \mathrm{E} \end{aligned}$ | +590 |  | + 100 |  |  |  |  |  |
| Do... |  |  |  | +1,200 |  |  |  |  |  |
|  |  | +500 | +47\% | +3,300 | +8 |  |  | +3, 880 | + 6 |
| 5 coly ¢ 4. | ${ }_{\text {A }}{ }_{\text {A }}$ |  |  | +800 |  |  |  |  |  |
| N |  | - |  | $+880$ | +\% | -800 | + |  |  |
| Juty 15. | c | +705 | - 6 |  |  |  |  | +705 | -16 |
| Jul | $\stackrel{C}{\text { C }}$ | +700 |  |  |  |  |  |  |  |
|  |  | 7 | +135 | +1,205 | +2\% |  |  |  | +20/6 |

Table 4--The days on which five speculative traders made purchases or sales to a net anount of j00,000 bushels or more in wheut futures, together with the net change in juture prices, from Jutue 1, to December 31, 1926-Continued


Tabta 4.-The clays on which five speculative traders made purchases or sales to a net amount of 500,000 bushels or more in wheat futures, together with the net change in futtre prices, from June 1 , to December 31,1926 -Continued

| Date | Tracter | 1927 May Autura |  | 1026 SeptenberUuture |  | 1920 Decombesfuture |  | Net phrchases or sales, anl futares canl bined | Nelprico change nant futura) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Net jurchases or sulos | Net price chatage | Net nurchanes or sules | Net price change | Net parchases or sates | Net price clange |  |  |
|  | ${ }_{1}$ | $\begin{aligned} & 1,000 \\ & \text { bechin. } \end{aligned}$ | Cents | $\begin{aligned} & 1,000 \\ & b u s h . \end{aligned}$ | Cents | 1,000 | Cenis | t.000 bush. | Cents |
| Not. |  |  |  |  |  | -6,50 |  |  |  |
|  | A |  |  |  |  |  |  |  | -198 |
| Aug. ${ }^{\text {a }}$ |  |  |  | +580 |  | -1,330 |  |  |  |
| Net |  |  |  | + |  | $-3,003$ |  |  |  |
|  | A |  |  |  |  |  |  |  |  |
| Aus ${ }^{3}$ |  |  |  | +2- |  | $\begin{array}{r} -1,920 \\ -0,00 \end{array}$ |  |  |  |
|  |  |  |  | +2,500 | +120 | $-2,170$ | +35 |  |  |
| Aus, 31. | A |  |  | +45 |  | -7\% |  |  |  |
| Do. |  |  |  |  |  | $-1.600$ |  |  |  |
| Net. |  |  |  | $+4$ | $-13$ | -3.35.5 | -6.61 | -1,600 | -1/6 |
| Sejut. 1. | $\cdots$ | - |  |  |  | -90 | +1 | -700 | $\cdots$ |
| Selt 2 | ${ }_{1}{ }^{\text {d }}$ |  |  |  |  | -710 |  |  |  |
| Do |  |  |  |  |  | -200 |  |  |  |
|  |  |  |  |  |  | -1,610 | -234 | $-1,010$ | -23/ |
| Eept, 3 | $\begin{aligned} & 13 \\ & 13 \\ & 13 \end{aligned}$ |  |  |  |  | $-500$ |  | -510 |  |
| Septit 11 |  |  |  |  |  | +1, $0 \times 10$ | +130 | $+1.000$ | +13 |
| Septil. |  |  |  |  |  | $+1,250$ | +235 | $\underline{+} \overline{1}, 300$ | +23/8 |
| Sepr. 1. | ${ }_{4}^{4}$ |  |  |  |  | +5,309 |  |  |  |
| Do. |  |  |  |  |  | $+2,000$ -600 |  |  |  |
| Net. |  |  |  |  |  | $+6,20$ | +20才 | +6,700 | +2\% |
| Eept. if. | AAB |  |  |  |  | +1,700 | +1561 |  |  |
| Stipt 17. |  |  |  |  |  | $-1.100$ | -2\% | -1,100 | +2, |
| Evin. ${ }^{\text {a }}$ |  |  |  |  |  | +1,500 | + $\%$ | +1,500 | + 6 |
| 8ent 21 | AC |  |  |  |  | +1, 000 |  |  |  |
| Wo |  |  |  |  |  | $-1,000$ |  |  |  |
| Not.... |  |  |  |  |  | $+100$ |  |  |  |
| 8elyt 22 | 4 4 |  |  |  |  |  |  |  |  |
| Do |  | +1,000 |  |  |  | + 80 |  |  |  |
| Net. |  | +1,000 | +13 |  |  | $+160$ | - | +1, 600 | - $7 /$ |
| Bept. ${ }^{3}$ | B |  |  |  |  | +800 | +1/3 | $\pm$ + $\times 0$ | +3/10 |
| Etprt. 2). | ABO |  |  |  |  | +1,500 |  |  |  |
| Do. |  |  |  |  |  |  |  |  |  |
| Do. |  |  |  |  |  | -500 |  |  |  |
| Net. |  |  |  |  |  | +1,500 | +2 | +1,500 | +2 |
| Sent. 30. | A |  |  |  |  |  |  |  |  |
| ${ }^{\text {d }}{ }^{\text {Do. }}$ |  |  |  |  |  | -800 |  |  |  |
| Nel..-- |  |  |  |  |  | +445 | -1/8 | +84 | -18 |
| Oct. 4. | 13 |  |  |  |  | -1,000 | $-12 / 2$ | -1,000 | -11/2 |
| Oct. 8 | $\stackrel{A}{\text { c }}$ | -700 |  |  |  |  |  |  |  |
|  |  |  |  |  |  | +885 |  |  |  |
|  |  | -700 | -153 |  |  | +805 | -13/2 |  |  |
| Oct. 11. | 8 |  |  |  |  | +1,000 |  |  |  |
|  |  |  |  |  |  | -1,000 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 14 | $\stackrel{\mathrm{B}}{\mathrm{O}}$ |  |  |  |  | +300 |  |  |  |
| Not ${ }^{\text {Do }}$ |  |  |  |  |  | -010 |  |  |  |
|  |  |  |  |  |  | -100 |  |  |  |
| ct. 16 | $\stackrel{8}{8}$ |  |  |  |  | +500 |  |  |  |
|  |  | $+500$ |  |  |  | -503 |  |  |  |
|  |  | $+80$ | +138 |  |  |  | +13/ | +800 | +11/4 |

Table 4.-The days on which five spectatative traders made purchases or salcs to a net amount of 500,000 bushels or more in wheat futures, together with the net change in future pric.s.s, from June 1 , to December SI, 1926-Continued


Table 4.-The days on which five speculative traders made purchases or sales to a net amounl of 500,000 bushels or more in wheat futures, together with the net change in future prices, from Sune 1, to December 31, 1926-Continued


Table 4 has been prepared to show the principal net trades of the five leading speculators for the period from June 1 to December 31, 1926. In Department Bulletin 1479 a similar compilation (p. 22) was made covering the period from April 18, 1925, to and including May 29, 1926. In the earlier report ${ }^{\text {e }}$ a similar table (p. 61) was

[^6]given covering the period from January 2 to April 18, 1925. Together these three tables cover a period of two years-1925 and 1926.

In the preparation of Table 4 only the net trades of 500,000 bushels or more of each of the five leading traders were included. These were entered by futures and by days, and whether thoy wero purchases or sales was indicaed. They were then combined by futures for each day and the net change in price of the approprinte future entered opposite the net trade. Finally, the futures were combined by days and brought to the right-hand column with the net price change in the dominant future set opposite whenever the net trade amounted to 500,000 bushels or more.

These five speculators traded to a net amount of at least 500,000 bushels on 111 of the 176 trading days of this period. They mede 222 net trades during the period, 34 of which were in the 1926 July future, 54 in the 1926 September, 86 in the 1926 December, and 48 in the 1927 May. Classified by traders, A made 62 of the 222 trades, B 64, C 58, D 26 , and E 12 .

Tables 5 and 6 summarize the results of Table 4 in comparing the degreo of correspondence between the net trades, whether purchases or sales, and the not price changes, whether increases or decreases. These two tables present an onumeration of the days on which the price and not of purchases and sales moved in the same direction. Table 5 giving the results by futures, and Table 6 by all futures combined.

Both tables show that, as the size of the net trade for these five traders increased, the proportion of days on which the price moved concurrently with the trading also increased. Both tables show that when the net trade amounted to $2,000,000$ bushels or more for one trading day, prices and net trades moved in the same direction on over 80 per cent of the days. When the net trade amounted to $3,000,000$ bushels or more the coneurrent days amounted to 77 per cent when considered by futures and to 87 per cent when all futures are combined. Above the $4,000,000$-bushel limit, both tables show a similarity in movement of 100 per cent.

Table 7 is a summary table, all futures combined, for each of the three periods and combines the results in a column of totals. The results are very similar to those of Table 6. Trades which reached a limit of $2,000,000$ bushels moved in the same direction with the price on 82 per cent of the days, and for trades of larger size the degree of conemrency is still greater. This compilation covers a period of two years and includes all futures and the largest speculators in the market. It is believen, therefore, to be sufficiently comprehensive to assure reliable resalts. Summarized briefly, the data show: (1) That the larger the net purchase or sale made by the loading speculators in the market and made within the limits of one trading day, the greater the degree of certainty that the price will move in the same direction; (2) that when these net trades reach an amount of $2,000,000$ bushels or more the probability is 4 to 1 that the net trade and the price will move in the same direction-if a purchase, upward; if a sale, downward.

Table 5.-Number of days on which the net of individual purchases and sales of D00,000 bushels or over and the fuheres price moved in the same direction, for wheat, for five large speculutors, by futures, from June 1 to December 51, 1926 :

| Net of purchpses and sales(Dushels) |  | Number of days when price ant nci of purchases and Sales moved in tho same diesection |  |  |  | Percentage of dags when price and at of marchase dind satus maved in the same |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | ${ }^{1027}$ |  | ${ }^{1906}$ | $\begin{aligned} & 1990 \\ & \text { sep. } \\ & \text { nemper } \end{aligned}$ | $\begin{aligned} & \text { Foz } \\ & \text { (em- } \\ & \text { ber } \end{aligned}$ | ${ }^{1927}$ | Tolul |
| 500,000 of over. | $\begin{gathered} 130 \\ 65 \\ 27 \\ 37 \\ 5 \\ 5 \\ 5 \\ 4 \\ 4 \end{gathered}$ | $\begin{array}{r\|r\|} 13 & \frac{29}{13} \\ 9 & 32 \\ 3 & 8 \\ 1 & \frac{32}{2} \\ 1 & 4 \\ 1 & 10 \\ 1 & 1 \\ \hline & 3 \\ \hdashline & 3 \\ \hline & \\ \hline \end{array}$ |  |  | $\begin{gathered} 88 \\ 88 \\ 28 \\ 20 \\ 5 \\ 5 \\ 2 \\ 1 \end{gathered}$ | (70 <br> 00 <br> 75 <br> 100 <br> 100 <br> $\cdots$ | $\left\|\begin{array}{c} 71 \\ 89 \\ 89 \\ 50 \\ 100 \\ 100 \end{array}\right\|$ | 1058501010100100100100100 | [48154 | 1087978181100100100100 |
| 1,1000.000 or over-....-..... |  |  |  |  |  |  |  |  |  |  |
| $3,1006,000$ or or oser.... |  |  |  |  |  |  |  |  |  |  |
| \%,000,000 or or orf. |  |  |  |  |  |  |  |  |  |  |
| $0,000.000$ or over- |  |  |  |  |  |  |  |  |  |  |
| ,000 or ov |  |  |  |  |  |  |  |  |  |  |

For two not tmies In tha 1923 Soptember futare and for one in the 1920 December futuro, as shown in Teblo t, the priee mado no met chomge. These trades are mot incluted to the summary tablo above.
Table 6.-Number of dayy on which the net of individual purchases and sales of $\overline{0} 00,000$ bushels or over and the futures price moved in the same dircction, for wheal, for five harge speculators, all futures combined, from June 1 to December S1, 1326


Table 7.-Number of days on which the net of individual purchases and sales of 600,000 bushels or over and the futures price moved in the same direction, for wheat, for leading specalators, all futures' combined, from January 2, 1995, to December 31, 1986

| Net of purcbases bod soles (busheis) | Number of days | Number of days when price and net of purchases and salew moved in same Ulrection |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Jnn. 220Apr. 15,1825 | Apr. 18, 1025 to May ${ }^{2} 9$, 1920 | $\begin{gathered} \text { Jthe I } \\ \text { to } \\ \text { Dec. } 31 \text {, } \\ 1926 \end{gathered}$ | Totsl |  |
|  |  |  |  |  | Number | Per cent |
| \$00,000 or arer. | 374 | 37 | 156 | $\mathrm{OH}_{4}$ | 257 | 69 |
| 1,000,000 or over. | 351 | 28 | $1: 9$ | 4 | 189 | $\pi$ |
| $2,000,000$ or orer. | 125 | 17 | 62 | 4 | 103 | 82 |
| $3,000,000$ or over. | 64 | 11 | 32 | 13 | \% 8 | 80 |
| $4,000,00 \mathrm{t}$ or over. | 38 | 7 | 19 | 8 | 34 | 89 |
| $5,000,000$ or over... | 23 | 4 | 12 | 5 | 21 | 9.1 |
| 8,00,000 or orer... | 11 |  | 8 | 2 | 10 | 91 |
| \%,000,000 or aver. |  |  | 4 | I | 5 | 100 |
| 8 ,000,000 or arer. | 3 |  | 3 |  | 3 | 100 |
| $9,000,000$ or over... | 1 |  | 1 |  | 1 | 100 |

[^7]
## days of Important price changes and large net trades

The period covered by this bulletin was on the whole considerably less spectacular than the periods amalyzed in the two earlier reports. This fact was mentioned in an earlier section where figures were presented showing a smaller average daily volume of trading, a smaller avernge of open commitments, and a smaller arerage daily range in price during 1926 than during 1925.

The lesser activity in the latter half of 1026 is also reflected somewhat in the number, though not in the size, of large trades made by lending speculators. During the furst of the three periods, January 2 to $\Lambda$ pril 1S, 1925, there were net trades of $2,000,000$ bushels or over on 25 per cent of the trading days, treating the operations of the leading speculators as a group. During the second period, April 19, 1925, to May 29, 1926, 2,000,000-bushel-or-over trades were made on 22 per cent of the days. During the last period, Junc 1 to December 31, 1926, the 2,000,000-bushel-or-over net trades of the group of leading speculators were made on only 16 per cent of the days.

While the number of large trades was fewer the size of each was as large as in the earlier periods. On certain of the days of this last period, particular trades-the operations of these five traders beint considered as a group-were unusually large. Table 8 shows the days on which the combined trading of the five leading speculators amounted to $2,000,000$ bushels or more. The details of the trading on each of these days-i. e., the transactions of the individual traders and the amounts each bought or sold and in what future-can be found in Table 4.

[^8]| Date | Net of purchases and sslos, all futures combined: | Net priog change (dominan futury) | Date | Net of purchases and sales, alt futures combined | Net price change (dominart future) ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | t,000 busheis | Cents |  | 1,000 bushels | Cents |
| Junas |  | +138 | Aug. 18. | -2,600 | +1 |
| JuE* | +3, 52, | + | Aug. 27- | $+3,320$ $-5,050$ | +1年 |
| Ju, | - ${ }^{3} 5000$ | -33/ | Sepr, 11. | +7,250 | +2\% |
| July | +2.200 | $+23$ | Sept. 14. | +6,700 | +23 |
| July 13 | +3,800 | +2,8 | Oct. 19 | $\pm 2,100$ | +149 |
| July ${ }^{\text {a }}$ | $-5,000$ | -17/ | Oct. 23. | -2,000 | -14 |
| July | -2, 815 | ${ }^{5} 5$ | Nov. 1 | -4,700 | 二1/ |
| Juy ${ }^{\text {a }}$ | +2200, | +39 | Nov. 12 | -4, $-2,100$ $-2,00$ | $-3$. |
| Alus. 3 |  | -4 | Nov. 17 | $-2,100$ | - |
| Aug. 16 | -4,000 | -15 | Nov. 1 | $-3,000$ | -1/ |
| Аи\%. 17. | -3.095 | -18180 | Dec. 10. | +3.565 | $\pm 13$ |

$t$ The plus sign ( + ) is used to inclicate net purchases and the minus sign ( - ) net sales for the day. 2 The plus siga $\{t)$ is atsed to fndicate an advance and tho minus sign $(-)$ a deedine in tho price of the
dominant future.

Table $S$ records $2 S$ individual days, showing the net amount bought or sold on each of these days by the five leading traders of this period and the amount of net price movement upward or downward. It will be observed that on one of these 28 days, September 11, a purchase to
a net amount of $7,250,000$ bushels was made. This net amount was bought by one trader and in one futare. Table 8 also shows one net trade of $6,700,000$ bushels made on September 14. This amount is a net of purchases by two traders of $5,300,000$ bushels and 2,000,000 bushels and one sale of 600,000 bushels, all in the 1926 December future. There are also three days on which the $5,000,000$-bushel limit was reached, the amount on two days being net sales and that on one day a net purchase. In all of the largest transactions the price moved in the same direction as the trade. Considering ail of the dates as a group, the price moved in the same direction as the net trade on 24 of the $2 S$ days.

While individual net trades were large during this period and show consistent direct relation to daily net price changes, the amount of the price movement per million bushes of sates or purchase was somewhat smallor than in former periods. Duing the first period, from Javuary 2 to Aprit 18, 1925 , the net price change per million bushels bought or sold by leading traders on days on which the net amounted to at least $9,000,000$ bushels averaged 1.76 cents. That is, during this period if a minimum of $2,000,000$ bushels was bought or sold within the limits of one trading day, the corresponding average price change was 1.76 cents per $1,000,000$ bushels bought or sold. For the period April 19, 1925, to May 29, 1926, if $2,000,000$ or more bushels was bought or sold, the net change in price averaged 0.73 cent per $1,000,000$ bushels bought or sold. During this last period, June I to December 32, 1926, the average change in price amounted to only 0.54 cent for each $1,000,000$ bitshels bought or sold.

These results indicate in a quantitative way a fact generally knownnamely, that the degree to which the market responds to heavy buying or selling depends upon the condition of the market at the time. Judged from the change in market conditions from the early months of 1925 to the close of 1926 , these results indicate that when prices are high, when the volume of trading is unusually large, and when market news is featured and the public is heavily in the market, prices fluctuate more widely in response to large-scale trading than during periods of relatively low prices, small volume of trading, and a general lack of public participation.

During the period from June 1 to December 31, 1926, there were six days on which the net change in the price of the dominant future amounted to 3 cents or more. On only four of these six days were there large trades; on the other two days, June 23 and August 11, net price changes of $31 / 4$ and $33 / 8$ cents, respectively, occurred. On four days during this period net trades of over $2,000,000$ bushels occurred, and the price movement was opposite to that of the net trade. These facts are reviewed to call attention to the price movements which are in no measure accounted for by large-scale speculative trades. In some cases unusual and wholly unexpected market news influencing trading results in a decided price change; in others, unusual trading by scalpers, spreaders, or hedgers brings about a decided change. Relative to the major price changes directly related to the market operations of leading speculators, these exceptional cases are decidedly in the minority and no attempt has been made to cover them.

No reference has been made in this stady to the influence of market news upon price. Market writers account for price movements
almost wholly from the news of the day-items about growing conditions, shipments, supplies, domestic consumption, exports, etc. To what extent these items explain price movements for the day it is dificult to say. To make an analysis of any value, one would need to give consideration to the exact time each item of market information reached the trading floor and observe its effect on price. An analysis of this kind, however, would involve an amount of work much beyond the limits of this study.

Undoubtedly, for certain days the explanation of price movements would be found largely in particular news items of importance; on othor days the operations of leading speculators would reinfores the news of the day; on still other days the buying or seling of small traders would be in line with the important market information. In any event, tho outstanding fact remans that the large-scale trading of leading speculators directy relates to price to a marked degree, and without this heary concentrated trading. price changes would bo more gradual and more more nearly in line with fundamental market information.

## SUMMARY AND CONCLUSIONS

In earlier investigations made by the Grain Futures Administration, as reported in Seuate Document No. 135 , entitled, "Fluctuations in Wheat Futures," and Department Bulletin 14 99 , entitled, "Speculative Transactions in the 1926 May Wheat Future," it was pointed out that large speculative operations represent an element of grave danger and are a constant hazard in the market, the fore of which may move prices far out of line and, temporarily at least, destroy the hedging value of the futures market. Reference was also made to the desirability of a limitation of some kind on the size of lines and especially on the extent of buying or splling within a day for purely speculative purposes by individual traders.
The results of the analysis presented in this study concerning the oparations of various groups of traders in their individual and combined effect upon wheat prices fully confirm the conclusions reached in the two earlier investigntions. These three reports taken together cover a period of two years, the first extending from January 2 to April 18, 1925; the second from April 19, 1925, to May 29, 1926, and the third from June 1 to and including December 31, 1926.

Within this two-year period are included months of erratic and highly uncertain wheat prices and months of medium price Huctuations, seasons of large volume of trading and seasons of moderate volume, seasons of large open comnitments and seasons of smatl open commitments, days of individual trading of immense proportions and days of only small individual trades. It is a period, therefore, affording opportunity for making a fair and representative study of the more important phases of market activity.

In each of these three studies the method of approach was the same. Traders were chassified into groups according to the character of their trading-largo-scale speculators, smail and mediumsized speculators, hedgers, commission-house accounts, scalpers, etc. The trading aud market position of each group was then obtained by combining the individual accounts. Finally the trading and changes in net position of each group were compared with the fluctuations in wheat prices to determine to what extent, if at all, the market oper-
ations of each group were directly or inversely related to price movements. Each of these studies has been limited to an analysis of the trading and changes in market position from day to day, compared with changes in price; that is, each day has been treated as a unit and no attempt has been made to analyze comprehensively intraday movements.

In relation to the interday problem, the group of traders of direct influence as a price factor is the large-scale speculative class, and of this class thoso speculators whose market position reached $2,000,000$ bushels or more are of outstanding importance. Each of these studies shows that the small and medium-sized speculators, taken as a group, were generally buyers when the leadiug speculators were sellers, and sellers when the leading speculators were buyers. Thus their combined tradiag and day-to-day changes in market position wero inversely, related to price. Of the other classes of traders, the hedging group is by far the most important. For the two-year period as a whole this group revealed no significant relation to price, although for the iast period, June 1 to December 31, 1926, the transactions of the hedging group show an appreciable inverse correlation.

In particular, the results of the present study not only confirm oarlier conclusions but strengthen them as well. In addition to a study of one particular future, a paralle analysis combining all wheat futures has been made. In doing this, the complete position of the trader was obtained which is particularly essential for days on which spreading or switching operations occurred.

The transactions of three groups of traders have been analyzed in this bulletin. The first group consists of the 42 largest speculators operating on the Chicago Board of Trade during the period covered by the study. These 42 traders comprise all of the speculators whose market position reached 500,000 bushels or over in any one future at any time during this period. This group is therefore not only representative but comprehensive.

The second group consists of the customers of 15 clearing firms of the Chicago Board of Trade. These 15 firms were selected from the clearing firms ${ }^{7}$ of the Chicago Board of Trade, their business being representative of the small and medium-sized speculative traders. None of the 15 firms are directly connected with the cash-grain business, none include the trading of the leading speculators among their accounts, but each is known to have a clientele of small or medium-sized traders. The custoners of these 15 firms carried an average of 39 per cent of the total contracts open on the long side of the market and 30 per cent of the total of all contracts open on the short side. These percentages are large enough to be representative of this class.

The third group includes as far as could be ascertained, all of the kadging accounts on the Chicago Board of Trade which at any time during the period renched a position of 500,000 bushels or more. There were 22 of these accounts representing milling companies, elerator companies, and grain shippers, both those shipping to the interior and those exporting. Just how much of the total hedging position for this period isincluded in thisgroup was not definitely determined. Judging from previous studies and the fraction of the total

[^9]of open commitments included in this group, it probably constitutes 50 per cent of the total hedging position.

The trading operations of each of the three groups just described were compared with the price for the 1926 December wheat future and for all futures combined. This consisted in comparing the combined net position of each group at the close of the market ench day with tho closing prico of the appropriate future. This comparison revonled a pronounced direct relationship betwoen the trading of the group of largo speculators and the price. This relationship when mensured statistienly showed a direct correlation of +0.71 .

The second group consisting of the small-trader customers of 15 clearing firms when compared with price revealed an equally striking relationship, hat inverse in character, the correlation coofficient being -0.83 . In other words, on days on which the price advanced, this group sold more than it bought; and on days on which the price declined it bought more than it sold. Likewise, the group of 22 hedging accounts also showed an inverse relationship, although not as pronounced as with tho group of traders represented by the 15 clear ing firms. This inverse refationship was occasioned in part by heavy buying of hedges by milling interests as prices declined, their buying being oceasioned by musual forward sales of flour, especially during August and September, 1926.

The positive relationship between the trading of the group of 42 large speculators and the futures price prompted further analysis of the transactions of this group. It was found that five of the 42 each accumulated a long or short position in tho market of over $2,000,000$ bushels at some time during the period June 1 to December 31, 1926. One of the 5 reached a maximum position of over $12,000,000$ bushels short and another a position of over $10,000,000$ bushols short. It was further found that thecombined trading of these 5 largest speculators accounted almost entirely for changes in the position of the 42 , the transactions of the 5 being directly related to price to the extent of a positive correlation of +0.72 . The individuals comprising the remaining 37 of this group traded at irregualr intervals, but as a class their trading showed no significant relation to price movements.

By liniting the trading of these five leading speculators, a single figure representing the combined net trade for the group of five was obtained for oach day. These daily net trades are simply the difference between the net position of the group from the close of one day to the closo of tho following day, and they were thorefore compared with the not change in the appropriato futures price for the corresponding. days.

There were in all 94 days of a total of 176 on which this group traded to a net amount of 500,000 bushels or more. On 64 of these 94 days, or 68 per cent, the price moved in the same direction as the net trade of the group-i. e., if a purchase, upward; if a sale, downward. The net trading of the five amounted to $1,000,000$ bushels or more on 56 days; on 44 of these days, or 79 per cent, the price moved in the same direction as their net trades. There were 28 days on which the net amount traded was $2,000,000$ bushels or over and on 24 of these days, or $S 6$ per cent, the price moved in the same direction as tho net trade. There wero five trades which excecded
$5,000,000$ bushels during the day and in each case the futures price moved in the same direction as the net trade.

These facts are presented in Table 7 (p. 30) and are shown in parallel columns with the results of similar comparisons made in tho two eurlier studies. Each of the three studies shows substantinily the same proportion of days on which the price moved concurrently with the net trade. For all days on which the net trade amounted to 500,000 bushels or over, the price and the net of purchases and sales moved in the same direction two times out of three. For days on which the net trade amounted to $1,000,000$ bushels or more the prico and the net of purchases and sales moved in the same direction threo times out of lour. Similarly, when the net trades were $2,000,000$ bushels or more the price and the net of purchases and sales moved in the same direction four times out of five.
The results of this stady and the results of the two detailed investigations preeding it lead to the conclusion that without the accumatlation of long or short "lines" of millions of bushels by a very tew leading speentators, the major swings in price would not have been so large. Particularly pronoumed is the relation of price to the mniket position of the leading speculators on days no which net purchases or sales of large proportions occurred. It is by no means a coincidence that the price and net trade moved in the same direction on 24 out of 28 of these individual days on which the net trading of the five leading speculators aggreyated $2,000,000$ bushels or more

In the two previous studies relating to the trading operations of the leading speculators it was suggested that some limitation should be placed on the quantity of futures, either long or short, that a single trader may be permitted to acquire, together with a limitation on the quantity that a single trader may buy or sell in one trading day for purely speculative purposes. This suggestion is again made. Preferably such a rule should be established and enforced by the exchanges themselves. Were this done, it is believed a greater degree of price stability would be attained. Price movements up or down would be more gradual and to a larger extent more in response to fundamental supply and demand factors. This is desirable both for the farmer and for the grain trade generally.

## APPENDIX

Table 1.-The aggregate long, the aggregate short, and the combined net position of 42 speculative traders, 15 clearing firms, and 22 hedging accounts, together with the total open commitments of the market, for the 1926 December wheat future and for all wheat futures combined, by days, from April 30 to December 31, 1926
[In thousands of bushels-i. e., 000 omitted]


Table 1.-The aggregate long, the aggregate short, and the combined net position of 42 speculative traders, 15 clearing firms, and 22 hedging accounts, together with the total open commitments of the marlet, for the 1926 December wheat future and for all wheat futures combined, by days, from April 30 to December 31, 1926-Continued
[In thousands of bushels-i. e., 000 omitted]

| Date | Total open commiltments |  | 42 speculative traders |  |  |  |  |  |  |  | 15 clearing firms, all wheat futures combined |  |  |  | 22 bedying accounts, all wheat futures combined |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $1926 \mathrm{De}-$ cember wheat (long or short) | $\begin{aligned} & \text { All wheat } \\ & \text { fature } \\ & \text { (long or } \\ & \text { short) } \end{aligned}$ | 1926 Decenber wheat |  |  |  | All wheat futures combined |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Aggregate |  | Net position |  | Aggregate |  | Net position |  | Aggregate |  | Net position |  | Aggregate |  | Net position |  |
|  |  |  | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short |
| June 1 | 2, G42 | 78, 147 |  | 710 |  | 710 | 6,780 | 16, 405 |  | 9,625 | 26, 979 | 23, 951 | 3,038 |  | 770 | 1,959 |  | 1,219 |
| 2 | 2,696 | 77, 333 |  | 710 |  | 710 | 6,770 | 15, 050 |  | 8,280 | 27, 901 | 23, 609 | 4, 292 |  | 1, 445 | 2,080 |  | 635 |
| 3 | 3, 152 | 80, 707 |  | 710 |  | 710 | 7, 015 | 19, 210 |  | 11, 295 | 29, 240 | 23, 700 | 5, 534 |  | 1,498 | 1,894 |  | 396 |
| 4 | 3,339 | 81.009 |  | 710 |  | 710 | 8,150 | 17, 805 |  | 0,745 | 20,347 | 24,334 | 5, 013 |  | 1,478 | 1,933 |  | 45.5 |
| 5 | 4,239 | 79, 013 | 100 | 725 |  | 625 | 9,480 | 13,505 |  | 4, 025 | 2S,546 | 26, 963 | 1, 533 | ... | 1,488 | 2, 002 |  | 514 |
|  | 5, 102 | 81,918 | 100 | 725 |  | 625 | 11,600 | 11,780 |  | 150 | 38,579 | 27, 871 | 705 |  | 1,577 | 1,931 |  | 突4 |
|  | 5, 329 | 81, 830 | 100 | 750 |  | 850 | 11,815 | 11,720 | 95 |  | 28,357 | 28,303 | 54 |  | 1,561 | 2,007 |  | 536 |
| 9 | 5,835 | 82,779 | 100 | 1,000 |  | 900 | 12,935 | 12,535 | 400 |  | 29, 059 | ${ }^{28,207}$ | 702 |  | 1,560 | 2,065 |  | 404 |
| 10 | 0,357 | 85,509 | 100 | 1,100 |  | 1,000 | 14, 610 | 14, 680 |  | 70 | 30, 234 | 27, 811 | 2, 423 |  | 1,476 | 1, 807 |  | 491 |
| 11 | 6, 690 | 85, 601 | 110 | 1,100 |  | 990 | 13,990 | 14,755 |  | 76.5 | 30, 833 | 27, 628 | 3,205 |  | 1,484 | 2,110 |  | 632 |
| 12 | 6, 924 | 87,350 | 625 | 1,175 |  | 550 | 15, 210 | 17, 570 |  | 2, 360 | 31, 521 | 27,453 | 5, 068 4,644 |  | 1,575 1,500 | 2, 135 $\mathbf{2} 275$ |  | 720 |
| 14 | 7,043 | 87, 151 | 625 | 1,175 |  | 550 | 15, 710 | 16, 305 |  | 085 | 31, 691 | 27, 017 | 4,694 |  | 1,500 2,005 | 2, 275 2, 280 |  | 775 |
| 15 | 7,117 | 87,095 | 625 | 1,175 |  | 550 | 15, 235 | 16,275 |  | 1,040 | 31, 572 | 27, 834 | 3,738 |  | 2,005 | 2,289 |  | 275 |
| 16 | 7, 620 | 86, 591 | 925 | 1,150 |  | 225 | 15, 960 | 13, 915 | 2,045 | ------ | 31, 8983 | 29,181 28,730 | 2,715 |  | 2,487 | 2,287 | 1,148 | ------ |
| 17 | 7, 652 | 87, 529 | 410 | 1,150 |  | 7740 | 15,205 15,940 | 13,815 13,420 | 1,480 2, 520 |  | 32, 173 | 28,736 29,833 | 3,437 |  | 3,385 <br> 3,430 | 2,237 | 1,148 1,099 | --.-.-.- |
| 18 | 7,037 | 87, 862 | 410 600 | 1,150 |  | 740 <br> 550 | 15,940 15,870 | 13,420 13,535 | 2, 2,385 |  | 32,315 33,113 | 29,933 29,021 | 4,382 |  | 3,439 <br> 3,706 | 2,330 2,365 | 1, 341 |  |
| 19 | 8,070 | 87, 418 | 600 600 | 1,150 |  | 550 550 | 15,870 15,805 | 13,535 13,400 | 2, 2305 |  | 32, 306 | 28, 114 | 4,592 |  | 3,740 | 2, 344 | 1,306 |  |
| 21 | 8,001 | 80, 018 | 600 1.290 | 1, 150 | 90 | 550 | 15,805 15,525 | 13, 13,700 13 | -1,755 |  | 32, 884 | 27, 717 | 5,207 |  | 3,557 | 2,378 | 1,209 |  |
| 23 | 8,586 8,989 | 80, 8054 | 1,270 | 1,200 | 70 |  | 15, 675 | 14, 065 | 1,610 |  | 33, 337 | 28, 091 | 5,246 |  | 3,936 | 2,368 | 1,568 |  |
| 24 | 9,028 | 88, 137 | 1,290 | 1,200 | 90 |  | 15,705 | 14,285 | 1,420 |  | 33, 013 | 27, 182 | 5,831 |  | 4,761 | 3,401 | 1,360 |  |
| 25 | 9,898 | 85, 307 | 990 | 1,400 |  | 410 | 10,540 | 14,320 |  | 3. 780 | 32,939 | 25.943 | 6, 996 |  | 4,834 | 3,000 | 1,834 |  |
| 28 | 0, 565 | 86,010 | 990 | 1,400 |  | 410 | 10,595 | 14,710 | - | 4,115 | 32, 440 | 25,960 | 6,480 |  | 4,062 | 2, 882 | 1,180 | --6. |
| 28 | 10, 939 | 85,772 | 990 | 1,400 |  | 410 | 9, 295 | 14,710 | --- | 5,415 | 32, 454 | 26, 227 | 6,227 |  | 2,997 | 2,705 | 292 | .-.-. |
| 29 | 12,102 | 87, 971 | 990 | 1.415 |  | 425 | 8,750 | 14, 605 |  | 5,855 | 33, 294 | 27, 011 | 6, 283 |  | 3,660 | 2,781 | 879 | ----.- |
| 30 | 12,271 | 89,000 | 090 | 1,415 |  | 425 | 9,910 | 14.850 |  | 4,940 | 32,997 | 27,495 28,809 | 5, 502 |  | 4,906 5,579 | 3,659 3,650 | 1,247 1,929 |  |
| July 1 | 12,096 | $\begin{aligned} & 88,082 \\ & 87,430 \end{aligned}$ | $\begin{aligned} & 990 \\ & 990 \end{aligned}$ | 1,415 |  | 425 425 | 9, 650 <br> 8,550 <br> 17 | 10,510 10,635 |  | 860 1,085 | 32,451 <br> 31,440 | 28,809 28,090 | 3,642 3,350 |  | 5,579 5,930 | 3,650 3,618 | 1, 312 |  |
| ( 2 | 12,654 14,440 | 87,430 86,654 | 1,990 1,090 | 1,515 | 475 | 425 | 11,550 | 10,785 8,705 | 2,845 | 1,085 | -31,400 | 29,377 | 2,023 |  | 6, 328 | 3,258 | 3,068 |  |


|  |  |
| :---: | :---: |
|  |  |
|  |  |


| 1,515 1,615 |
| :---: |
| 1,575 |
| 1,575 |
| 2,220 |
| 1,815 |
| 1,875 |
| 1,905 |
| 2,005 |
| 2,005: |
| 1,705 |
| 1,515 |
| 1,515 |
| 1,515 |
| 1,515 |
| 1,515 |
| 1,635 |
| 1,495 |
| 1,295 |
| 1,110 |
| 1,010 |
| 835 |
| 2,310 |
| 2,310 |
| 2,310 |
| 1,725 |
| 1,725 |
| 1,725 |
| 1,725 |
| 1,725 |
| 2,950 |
| 3,450 |
| 3,450 |
| 3,450 |
| 5, 110 |
| 7, 110 |
| 8,610 |
| 9,110 |
| 8,375 |
| 8,220 |
| 8,520 |
| 8,565 |
| 8,690 |
| 9,770 |
| 14,920 |
| 18,975 |
| 21, 225 |
| 24, |




$$
\begin{array}{r}
12,250 \\
12,275 \\
11,575 \\
10,210 \\
10,710 \\
14,100 \\
14,170 \\
14,020 \\
15,845 \\
16,345 \\
16,195 \\
15,935 \\
16,580 \\
11,555 \\
12,125 \\
11,305 \\
11,640 \\
9,325 \\
9,875 \\
9,975 \\
9,075 \\
0,600 \\
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7,050 \\
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6,890 \\
6,930 \\
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4,790 \\
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4,530 \\
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4,840 \\
4,985 \\
5,310 \\
5,800 \\
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\end{array}
$$

| 8,7808,580 |  |
| :---: | :---: |
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|  | 8,460 |
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| 7,950 |  |
| 7,7807,600 |  |
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| 6, 670 |  |
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|  | 6,675 |
| 6, 555 |  |
|  | 6,820 |
| 6,000 |  |
|  | 7,595 |
| 5,880 |  |
|  | 5,385 |
| 3,825. |  |
|  | 3,305 |
| 3, 520 |  |
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| 10. 470 |  |
|  | 11,570 |
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| 9,355 |  |
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| 9,955 |  |
|  |  |
|  | 10, 505 |
| 13, 265 |  |
|  | 17, 005 |
| 19, 010 |  |
|  | 19, 510 |
| 16, 155 |  |
|  | 15, 500 |
| 15, 700 |  |
| 15,36016,210 |  |
|  | 16, 210 |
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| 24, 085 |  |
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$\qquad$ | $-{ }^{-1}$ |
| :--- | :--- |
| 3 | | 32,240 |
| :---: |
| 31,551 |
| 31,154 |
| 30,951 |
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| 30,399 |
| 30, |
| 29,973 |
| 29,667 |
| 28,579 |
| 29,389 |
| 29,142 |
| 32,141 |
| 32,346 |
| 31,822 |
| 32,724 |
| 31,836 |
| 32,916 |
| 31,510 |
| 31,889 |
| 32,286 |
| 33,801 |
| 34,895 |
| 35,295 |
| 36,798 |
| 37,131 |
| 36,892 |
| 37,863 |
| 38,485 |
| 39,816 |
| 40,234 |
| 40,686 |
| 40,480 |
| 42,208 |
| 42,479 |
| 43,078 |
| 43,057 |
| 42,063 |
| 41,711 |
| 41,597 |
| 41,937 |
| 41,722 |
| 42,084 |
| 42,342 |
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| 2,1351,668 |  |
| :---: | :---: |
|  |  |
|  | 1,648 |
|  | 2, 615 |
|  | 3, 681 |
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|  | 3,079 |
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|  | 1,851 |
|  | 2,971 |
|  | 872 |
|  | 1, 055 |
|  | 2,153 |
|  | 3,388 |
|  | 3,913 |
|  | 3,925 |
|  | 4,243 |
|  | 4, 017 |
|  | 2,857 |
|  | 4,143 |
|  | 3, 822 |
|  | 6,276 |
|  | 7,791 |
|  | 7,883 |
|  | 6, 878 |
|  | 9,818 |
|  | 10,357 |
|  | 10,450 |
|  | 10,360 |
|  | 9, 559 |
|  | 9,313 |
|  | 9, 344 |
|  | 9, 578 |
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|  | 11,842 |
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|  | 12,820 |
|  | 13, 810 |

$\qquad$ 8,273
10,067
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11,81
12,032
12,492
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12,25
13,727
14,441
14,009
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16,788
17,110
17,448
17,580
17,492
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18,142



$\begin{array}{r}4,926 \\ 5,302 \\ 5,612 \\ 4,609 \\ 4,080 \\ 3,242 \\ 3,418 \\ 2,808 \\ 2,664 \\ 1,942 \\ 1,415 \\ \cdots 351 \\ \hdashline \cdots \cdots \cdots \\ \hdashline \cdots \\ \hdashline \cdots\end{array}$ $\qquad$ --------

MAJOR TRANSACTIONS IN THE 1926 DECEMBER WHEAT FUTURE

Table 1.-The aggregate long, the aggregate short, and the combined net position of 42 speculative traders, 10 clearing firms, and 22 hedging accounts, together with the total open commitments of the market, for the 1926 December wheat future and for all wheat futures combined, by days, from April 80 to December 31, 1926-Continued

- In thousinds of bushels-i. e., 000 omitted]

| Date | Total open commitments |  | 42 speculative traders |  |  |  |  |  |  |  | 15 clearing Grms, all wheat futures combimed |  |  |  | 22 hedging accounts, all wheat futures combined |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1928 De cember wheat (long or short) | Allyheat futures (long or short) | 1928 Decsmber whest |  |  |  | N Al wheat futures combined |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Aggregate |  | Net position |  | Aggregate |  | Net position |  | Aggresate |  | Net position |  | Agrregate |  | Net position |  |
|  |  |  | Long | Short | Long | Short | Long | Short | Long | Shor: | Long | Short | Long | Short | Long | Short | Long | Short |
| Sept. 1 | 63,527 | 103,012 | 2,265 | 25, 150 |  | 22,925 | 5, 050 | 26,500 |  | 21, 550 | 43, 028 | 29, 286 | 13, 742 |  | 17,221 | 7,599 | 9,622 |  |
| 2 3 | 64,824 | 105, 695 | 2, 265 | 27, 310 |  | 25, 045 | 4,945 | 23, 270 |  | 24, 325 | 43,075 42 42 | 29,035 28,732 | 14,40 13,485 |  | 17,602 <br> 17 <br> 182 | 6,048 6,250 | $11,554$ |  |
| 3 | 65, 713 | 104,800 105,314 | 2, 165 | 27,845 27,940 |  | 25,680 25,775 | 4,405 4,430 | 20,805 20,900 |  | 25, 400 | 42,717 43,269 | 28,732 | 13,485 14,445 |  | 17,426 18,163 | 6,250 5,533 | 11, 176 |  |
| 7 | 67,049 | 104, 267 | 2, 165 | 27, 985 |  | 25, 820 | 4,430 | 20, 94.5 |  | 25,515 | 42, 499 | 28,457 | 14, 042 |  | 18, 018 | 5,923 | 12,005 |  |
| 8 | 69,333 | 106, 111 | 2, 170 | 27, 940 |  | 25, 770 | 4,335 | 29, 890 |  | 25, 555 | 43,718 | 29, 527 | 14,191 |  | 18,330 | 6,803 | 12,434 |  |
| 9 | 69, 037 | 105, 611 | 2,310 | 20,775 |  | 24,185 | 4,475 | 28,660 |  | 24,185 | 43,185 | 30, 613 | 12, 575 |  | 18,262 | 6, 698 | 12, 604 |  |
| 10 | 69, 627 | 105, 602 | 2,340 | 26,940 |  | 24, 000 | 4,505 | 23,820 |  | 24,315 | 43, 404 | 30, 943 | 12,461 |  | 18,657 | 5, 724 | 12, 933 |  |
| 11 | 66, 361 | 103,008 | 2,220 | 10, 380 |  | 17,380 | 4,465 | 21,460 |  | 16,095 | 42, 807 | 30, 4.47 | 12,360 |  | 18, 449 | 6, 037 | 12,412 |  |
| 13 | 67,872 | 104, 682 | 2,165 | 20, 025 |  | 17,800 | 3,940 | 21,855 |  | 17,915 | 43, 603 | 30, 146 | 13, 547 |  | 18, 513 | 6, 024 | 12,489 |  |
| 14 | 64, 424 | 100,797 | $2_{2,165}$ | 13,255 |  | 11,000 | 4,220 | 15,055 |  | 10,835 | 41,189 | 27,850 | 13,339 |  | 18, 175 | 0,300 | 11,875 |  |
| 15 | 64,508 | 100, 467 | 2,165 | 13,745 |  | 11, 580 | 4,700 | 15. 505 |  | 10,805 | 42,972 | 30, 579 | 12,303 |  | 18, 578 | 6,280 | 12, 2188 |  |
| 16 | 62,904 | 98,422 | 2,765 | 11,850 |  | 9,085 | 5. 400 | 13,570 |  | 8, 110 | 42, 130 | 31,092 | 11,038 |  | 18,271 | 6,284 | 11,987 |  |
| 17 | 64,458 | 100, 043 | 2, 165 | 13,200 |  | 11,035 | 4,920 | 14,920 |  | 10,000 | 43, 557 | 31,200 | 12, 357 |  | 18,667 | 5,681 | 12,986 |  |
| 18 | 64, 339 | 100, 101 | 2,165 | 13. 670 |  | 11,505 | 4,920 | 15,390 |  | 10,470 | 43, 881 | 31, 469 | 12, 112 |  | 18,685 | 6, 261 | 12, 424 |  |
| 20 | 65, 463 | 101, 527 | 3,665 | 13,740 |  | 10,075 | 6, 370 | 15,280 |  | 8, 890 | 44,431 | 32,416 | 12,015 |  | 18, 504 | 6,302 7 7 | 12,202 |  |
| 21 | 65, 5188 | 101,710 | 3,715 | 11, 670 |  | 7,955 | 6, 520 | 12,405 |  | 5, 885 | 43,280 42 445 | 34, 2028 | 9,018 9,129 |  | 18,226 <br> 18,187 <br> 18 | 7,013 7,588 | 11, 213 |  |
| 22 23 | 64,186 63,720 | 101,280 100,582 | 3,235 2,450 2,450 | 10,525 9,960 |  | 7,290 7,510 | 8,205 | 11,020 10,340 |  | 2,755 <br> 3,185 | 42,445 42,303 | 33,316 32,742 | 8,129 8,501 |  | 18,187 17,038 | 7,588 | 10,596 10,467 |  |
| 24 | 64, 630 | 101,061 | 2,450 | 9,680 |  | 7,100 | 6,550 | 10, 020 |  | 3, 470 | 41,744 | 31,852 | 9, 892 |  | 17, 926 | 7,397 | 10,529 |  |
| 25 | 65, 000 | 101, 050 | 2,450 | 10,045 |  | 7, 595 | 6, 085 | 10, 425 |  | 3,440 | 41,720 | 31, 068 | 10,652 |  | 17,944 | 7,492 | 10,452 |  |
| 27 | 05, 197 | 101.283 | 2,450 | 9,915 |  | 7, 465 | 7, 160 | 10,295, |  | 3, 135 | 40, 749 | 31, 211 | 9,538 |  | 17,715 | 7,841 | 9,874 |  |
| 28 | 34, 881 | 100,844 | 3,250 | 9,445 |  | 6, 195 | 8,405 | 10,040 |  | 1,635 | 30, 511 | 31, 328 | 8, 183 |  | 17,704 | 7,888 | 9,816 |  |
| 29 | 64, 495 | 100, 989 | 3,950 | 8.320 |  | 4,370 | 8,615 | 8,670 |  | 55 | 30, 737 | 32, 490 | 7, 217 |  | 18,648 | 7,901 | 8,747 |  |
| ${ }^{30}$ | 61,778 | 08, 225 | 3.350 | 7,280 |  | 3,930 | 8,265 | 7,630 | - 635 |  | 38, 750 | 30, 393 | 8,360 8,621 |  | 17,686 | 8,089 8,011 | 0,597 0,660 |  |
| Oct. 1 | 62,080 61,822 | 96, 617 96,806 | 4,160 4,280 | 6,695 6,880 |  | 2,535 2,620 | 9, 320 9,465 | 7,035 7,190 | 2. 235 2, 275 |  | 38,853 38,533 | 30,232 30,982 | 8,621 7,571 |  | 17,671 17,824 | 8,011 7,808 | 0,660 10,016 |  |
| 4 | 62,415 | 97, 588 | 3,355 | 7,955 |  | 4,600 | 8,595 | 8,285 | - 330 |  | 30, 610 | 30,868 | 8,742 |  | 18,218 | 7,187 | 11,031 |  |


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## 39,8 40,42 41, 42, 42, 41, 41, 39, 40, 39, 38, 37, 37, 37, 37, 37, 40, 40, 41, 41, 42, 44, 45, 46, 46, 45, 45, 43, 44, 45, 46, 47, 47, 48, 48, 47, 49, 48, 48, 48, 45, 45, 45, 44, 43, 42, 40, 40, 38, 3



9,015
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8,748
10,557
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$6 ; 973$
7,684
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6,398
5,695
6,217
5,545
4,121
4,773
8,519
8,836
8,700
9,201
0,710
12,308
14,247
13,827
13,131
11,598
11,530
9,337
10,100
12,780
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16,930
10,518
10,977
17,965
17,440
10,910
10,953
17,433
10,016
14,506
14,219
15,237
13,658
14,330
14,0010
12,467
12,581
10,977
11,080





 $\qquad$ ..........

Table 1.-The aggregate long, the aggregate short, and the combined net position of 42 speculative traders, 15 clearing firms, and $2 \mathbb{2}$ hedging accounts, together with the total open commitments of the market, for the 1920 December wheat fulure and for all wheat futures combined, by days, from April 30 to December 31, 1926-Continued
[In thousands of bushels-i. e., 000 omitted]

| Date | Potal open com. mitments |  | 42 speculative traders |  |  |  |  |  |  |  | 15 clearing firms, all wheat lutures combined |  |  |  | 22 hedging accounts, all wheat futures combined |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1026 December wheat (long or short) | All whent futures (long or short) | 1926 December wheat |  |  |  | All wheat futures combined |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Aggregate |  | Net position |  | Aggregato |  | Net position |  | Asgregato |  | Net position |  | Aggregato |  | Net position |  |
|  |  |  | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short | Long | Short |
| Dec. 7 | 12,468 | 91,195 | 1,505 | 850 | 0.55 |  | 3, 145 | 10,445 |  | 7,300 | 37, 683 | 26, 380 | 11, 174 |  | 13,857 | 5,832 | 8, 024 |  |
| 8 <br> 0 | 10,719 1014 | 80,313 80,549 | 1,490 | 715 405 | 775 1.125 |  | 3,125 <br> 3,155 | 10,010 0,830 |  | 0, 885 | 36, 485 | 25, 932 | 10,553 11,432 |  | 13,630 13,670 | 5,819 5,777 | 7,811 7 7 |  |
| ${ }_{10}^{9}$ | 10,145 0,605 | 80,549 93,080 | 1,530 | 405 305 | 1,125 1,075 |  | 3,155 4,765 | 19,830 11,655 | - | 6,675 | 37,029 38,732 | 25,697 25,137 | 11,432 13,595 |  | 13,670 13,604 | 5,777 <br> b, 749 <br> 8 | 7,902 7,855 |  |
| 11 | 9,343 | 03, 353 | 1,330 | 310 | 1,020 |  | 4,960 | 12, 34.5 |  | 7,385 | 35,780 | 25, 215 | 13, $5 \times 65$ |  | 13, 505 | 5, 8.54 | 7,651 | ---.....- |
| 13 | 9, OfH | 05, 559 | 1,285 | 210 | 1,075 |  | 4,780 | 13, 155 |  | 8,375 | 30, 622 | 25, 5108 | 14, 114 |  | 13,381 | 5,900 | 7,421 | ....... |
| 14 | 8,832 | 67, 699 | 1,375 | 220 | 1,155 |  | 5, 250 | 13, 025 |  | 8,375 | 40, 081 | 25, 678 | 15, 303 |  | 13, 501 | 6, 028 | 7, 5033 |  |
| 15 | 8,710 | 06, 167 | 1,465 | 220 | 1,245 |  | 3, 320 | 15, 180 | - | 9, 800 | 40, 032 | 25, 750 | 14, 276 |  | 13, 246 | 5,497 | 7,749 | ....... |
| 16 | 8, 4195 | [17, 0183 | 1,400 | 230 | 1, 180 |  | 厄, 705 | 14, 115 |  | 8. 410 | 40, 164 | 25, 620 | 14, 538 | - | 13, 025 | 5,523 | 7,502 | --...... |
| 17 | 7,952 | 97, 853, | 1,200 | 185 | 1, 10.5 | - | 5, 720 | 14,220 |  | 8, 500 | 40, 141 | 25, 618 | 14,473 |  | 12,814 | 5, 407 | 7,407 | ....-...- |
| 18 | 7.765 | 91, 123 | 880 | 185 | 6815 | .-... | 6, 100 | 14, 775 | .-. | 8,675 | 39, 269 | ${ }^{25}$, (100) | 14, 209 |  | 12,028 | 6, 504 | ${ }^{6,124}$ | --..--- |
| 21 | 7,009 | 83, 991 | 855 | 500 | 3.5 |  | - 6,070 | 13, 1885 |  | 7, 715 | 39, 702 | 24, 252 | 14, 11,450 |  | 11,808 10,810 | 5,760 | 5, $\mathbf{5}$, 059 | --...- |
| 22 | 5,390 | 03,362 | 850 | 590 | 350 |  | 6, 100 | 12,570 |  | 6, 470 | 38, 019 | 25, 068 | 12.951 |  | 10,478 | 5, 820 | 4,649 |  |
| 23 | 5, 158 | 93, 672 | 000 | 600 | 300 |  | 6, 200 | 12,650 |  | 8, 450 | 38.403 | 25, 088 | 13,317 |  | 10,305 | 5, 817 | 4,548 |  |
| 24 | 4, 589 | 93, 443 | 900 | 100 | 800 |  | 6,200 | 12,150 |  | 5,950 | 38, 155 | 24,903 | 13,252 |  | 10,233 | 6,715 | 4, 518 |  |
| 27 | 4,154 | 93, 550 | 875 | 165 | 710 |  | 7,310 | 12,440 |  | 5, 130 | 37, 202 | 24, 635 | 12,507 |  | 10, 049 | 5,761 | 4, 2888 |  |
| 28 | 3,474 | 94, 454 | 846 | 135 | 705 |  | 8, 110 | 11,880 |  | 3,770 | 38,081 | 23, 900 | 14, 161 |  | 10,030 | 5, 8013 | 4,146 |  |
| 29 | 2,578 | 92,839 | 665 | 135 | 530 |  | 7,580 | 11,875. |  | 4,205 | 36,679 | 22, 586 | 13,903 |  | 10,554 | 6,154 | 4, 400 |  |
| 30 31 | 1,718 0 | 93,103 92,014 | 615 0 | 135 | 480 0 |  | 7,225 $\mathbf{6 , 3 5 5}$ | 11,875 11,040 |  | 4,060 5,585 | 35,933 36,165 | 22,868 22,010 | 13,075 14,155 |  | 10,632 10 | 6,067 | 4,565 4,616 |  |
|  |  |  |  |  |  |  |  |  |  |  | 3, 1 |  |  |  |  |  |  |  |

Table 2.-The net position in wheat futures of five leading traders, by futures
[In thousands of hashels-i. e., 000 omitted]

'The pias ( + ) sigu incheates a bong postion aid the minus $(-)$ sign a short postion fer the futuro showit.
and for all futures combined, by dayj, from 4 pril 30 to December 31, 1020
[In chousands or bushetis-i. 0., 000 omitted]


The plus $(t)$ sigh indfeates a long postion and the minus ( - ) stgn a short gosition for the futura shown.

Table 2.-The net position in wheat futures of fove leating traters, by futures and
[tin thousunds of bushels-i. e., 000 omitedu)

for all futures combined, by days, from April so to December Si, 1926-Continued
[In thousands of busiols-1. o., 000 onitterl]
(

Table 2.-The net position in wheat fulures of five leading traders, by futures and
[In thousiands of bushels-i. $0 ., 000$ ourited]

for all futures comhined, by days, from April SO to December $31,19 \approx 6$-Continued
[in thouskids of bushots-l, a, 000 omitted]


Table 3-The opening, high, low, and closing prices of the 192 December whent future with the danly range und the net change in price, by days, from May 5 to December 31, 1020 .
[Ta cents per bushel]

tan prioe asked and $b=$ price bid at the close of the murket.

Table 3.-The opening, high, low, and closing prices of the 1920 Decomber wheat future with the daily ratage and the net change in price, by days, from May 5 to December 31,1026 -Contintued
[in cents far bushel\}


The hagh price for the Hife of the fature was $13.501 / \mathrm{on}$ July 19 , and the low prico wras $\$ 1.32$ on Dec. 31 .



Table 4.-Average closing price and net change in pricc in each of the wheat futures during its period of dominance, ${ }^{1}$ from 4 pril 30 to December 31, 1026
[in cents ne: bushel]


1 The pertod duting which ench future carfed a lerger volume of ogen commitments thanany other futare.

Table 4．－Averuge closing price and net change in price in each of the toheat futures during its period of dominance，from April SO to December 51，1026－Continued
［In cunts per bushel］

| Dato |  |  | Dato |  | closing B <br> 102 <br> Nins <br> fituro | Niet elange fron close of jus vions day | Date | A verngo grim | closing co <br> 1927 <br> Miny <br> thturo | Net ehnnge from cluse of pe－ vious diay |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\{3 \geq 1+i$ | ＋1 | Scpl 1 |  |  | ＋1， | Nor． | 13934 |  |  |
|  | …e．＊． 135 | ＋24： | Scpl． | 13331 |  |  |  | 1393） |  | －4／60 |
|  | －13．1 | －1 | f | 1344 |  | ＋3／3： |  | 1105／3 |  | $+1$ |
|  | －i3fa | ＋236 | 4 | 13235 |  | －138 |  | 141 |  | ＋14 |
|  | －．．．13， | ＋13： |  | 1313／2 |  | ＋188． |  | 1403 |  | －1／4 |
|  | －130 ${ }^{2}$ | $-1$ | 8 | 133 |  | －12． |  | 14218 |  | ＋13／8 |
|  | 13438 | ＋2 | 0 | 1314 |  | ＋14． |  | 1．138 |  | －1／6 |
|  | $1212{ }^{1} 2$ | $-{ }^{7}{ }^{\text {i }}$ | 10 | 1312.0 |  | ＋${ }^{\text {d }}$ |  | 11.035 |  | －132 |
|  | 1290 | $-1$ | 11 | 13153 |  | ＋23 ${ }^{\text {2 }}$ |  | $13 \mathrm{~S} /{ }^{\text {1 }}$ |  | －3 |
|  | $11.12{ }^{2}$ | ＋8 | 13 | 1353 |  | －14． |  | 135\％ |  | －139 |
|  | －1127 | ＋18 | 14 | 18 S |  | ＋23／4 |  | 14ty | 141 | ＋3\％ |
|  | 1，$\square^{2}$ | －36 | 15 | 1301／1 |  | －3， |  |  | 1391／2 | －13\％ |
|  | 1.85 | ＋039 | 16 | 135 ？${ }^{\text {ch }}$ |  | ＋13\％ |  |  | 1385\％ | －3／3 |
|  | $18.53{ }^{1}$ | $\underline{+1}$ | 17 | 1368 |  | －2， |  |  | 13015 | ＋3 |
|  | 1588 ¢ | $+1$ | 13 |  |  | －9 |  |  | 137\％ | －21／3 |
|  | － $88{ }^{2}$ | －2：${ }^{\prime \prime}$ | ＊ | 1310 |  | ＋39 |  |  | $13.3 / 4$ | ＋12 |
|  | 1 $142{ }^{2}$ | －1 | 21 | BS ${ }^{2}$ |  | ＋2\％ |  |  | 13876 | ＋128 |
|  | $1140{ }^{\circ}$ | $-1^{1}$ | 2 | 13 cos |  | －1／4 |  |  | 13712 | －39\％ |
|  | $\cdots$ lisfry | －13？ | 4 | 13434 |  | ＋3： |  |  | 1383／8 | ＋130 |
|  | 1 1！44！ | ＋19 | 21 | 13738 |  | $-161$ |  |  | 150 | ＋138 |
|  | 1423 ${ }^{3}$ | $\pm$ | 25 | 136 |  | －73 |  |  | 139 | －1 |
|  | $1{ }^{1 / 11^{2}}$ | －39 | 27 |  |  | ＋12 |  |  | 1383／4 | －1／6 |
|  | － $140^{2} \mathrm{y}$ | ＋33＊ | 20 | 1387 |  | ＋3 |  | ．．．－－． | 13738 | －1 |
|  | 1013 | ${ }_{0}$ | 23 | 1405 |  | ＋3， |  |  |  |  |
|  | 14：37 ${ }^{3}$ | －53 | 30 | $1+6$ |  | －1／8 | Dec． |  | 1301／2 | ＋13 |
| 入ug．${ }^{2}$ |  | －4is | Oct． | $1412 / 6$ |  | ＋5 |  |  | 3415 | ＋15\％ |
| Aus 3 | ．．．．1：50 ${ }^{\text {a }}$ | $-13$ |  | 1.109 |  | －7\％ |  |  | 1503／8 | －3／4 |
| 4 | ．．．．1301 | $-3 \cdot{ }^{3}$ |  | 12S |  | －11／2 |  |  | 1413 | ＋536 |
| 5 | 13S ${ }^{\text {a }}$ | $-6$ | 5 | 13545 |  | －s／3 |  |  | 1413 | －1／1 |
| 0 | －MSt | －${ }^{5}$ | $\underline{1}$ | 13714 |  | －1 |  | ；－－．．． | 14038 | －5／8 |
| 7 | ， 13137 | $-1.1$ | 5 | 13 S 3 |  | ＋15 |  |  | 1.408 | 0 |
| 0 | ，！38tin | 1．35 |  | 13714 |  | －151 |  |  | 1.6186 | －3／8 |
| 10 |  | ＋143 | ， | 1373 |  | ＋1／3 |  |  | 13018 | $-188$ |
| 11 | 13\％ | $-3^{3}{ }^{3}$ if | 11 | 33876 |  | ＋136 |  |  | 1383／4 | －1780 |
| 12 | － $13 \mathrm{~S}^{2} \mathrm{~S}^{2}$ | －1 | 13 | 1373 |  | －128 |  |  | 130\％ 8 | ＋ 8 |
| 13 | （ $135{ }^{\text {a }}$ | －18 | 17 | 1403 |  | ＋29\％ |  |  | 38812 | －7 |
| 1 |  | ＋19 | $15^{2}$ | 130\％： |  | －35 |  |  | 140 | $+15$ |
| 515 | 15954，$\ldots$ | －13 ${ }^{-18}$ | 10 | 141 |  | $\pm 11$. |  |  | 130 | －1 |
| 15 | 1384 | －151． | IS | 1．13／4 |  | ＋${ }^{3}$ |  |  | 1383 | －16 |
| 15 | 1303 c | ＋1， | 10 | 1438 |  | ＋13 |  |  | 13988 | ＋4 |
| 19 | 1382 | －1 | 2 | 1434 |  | －3， |  |  | $1303 / 8$ | － |
| 20 | （107） | ＋13： | 91 | 3423 |  | － 38 |  |  | 14178 | $\pm 25$ |
| 3 | 1593 | －113 | 年 | 1484 |  | ＋288 |  |  | 1403 | －13／6 |
| 4 | $1393{ }^{3}$ | 教： | 2 | 1.412 |  | － 16 |  |  | 1493\％ | －1／30 |
| 23 |  | －7 | 25 | $\mathrm{SH}_{3} \mathrm{~S}_{3}$ |  | －13019 |  |  | 1408 | ＋18 |
| 25 | 1393） | 438 | 20 | 1．123 ${ }^{2}$ |  | －35 |  |  | 1113 | ＋5 |
| 20 | $\mathrm{a}_{2} \mathrm{SH}_{3}$ | －14， | 97 | $\mathrm{H}_{3}$ |  | ＋！ |  |  | 138\％8 | －2\％ |
| 27 | 136251． | －14 | 2 | $1 \cdot 1975$ |  | －18 |  |  | 13812 | ＋10 |
| 刃 | $135{ }^{1}$ | $-13$ | $\stackrel{3}{3}$ | 1423 |  | －188 |  |  | 1381 | －13 |
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| 31 | 125！ | －3 |  |  |  |  |  |  |  |  |

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[^0]:    1 This study is based primaries on reports to the Chicago office of the Grain Futures Administration. Much of the stamifichl material was complied ta the Chfengo office under the direction of L. A. Futz, grain exchange supervisor in charge. Itemise, Mr. Fizz, J. M. Meh, Foul Melt, and E. MI, Blaylock rondecd valuable asslistame ta connection with the preparation of this report, espeogaliy through helphat critic reading of the manuscripts.
    i Sixty-Ninth Congress, first session, June, 10 ?a.

[^1]:     futurk. U, S. Dept Agr. But. 1470, si p., illus., 1927. *.

[^2]:    *For a geriod coverfug an untire yoar, howevor, the Nray future is the most important.

[^3]:    - Sec also Fluctuations in Whent Futuros, pp. $51-50$.

[^4]:    ${ }^{3}$ See fortiote 2.

[^5]:    
     cloce of the day brevors to the close of the day shown.
    TWhencver the net tratimg in usi.gho futhre was less than 600,000 bushels, such quantity vas not included in the net transaclion of all fotures combinet.
    'Thatnet grice change used for oreh date upplas to the fature with the largest open interest.

[^6]:    4 See footinots 2

[^7]:     this particular period of the ytur, bowever, practically all of be largo individualirades were fo the May future.

[^8]:    Table S.-Days on which the combined net of the purchases and sales of five leading speculators amounted to 2,000,000 bushels or more in all wheat futures, together with the net change in future prices, from June 1, to December S1, 1926

[^9]:    The bumber of clearing firms varles from time to time but usually ranges botween 130 and 140 .

