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W H E A T S T U D I E S

OF THE FOOD RESEARCH INSTITUTE

VOL. III, NO. 6

MAY 1927

SURVEY OF THE WHEAT SITUATION

DECEMBER 1926 TO MARCH 1927

THE FOUR months under review were noteworthy for heavier international shipments than in any similar period of recent years. Large crops became available in Australia and Argentina, and the decline of ocean freight rates partially removed an influence that had previously restricted overseas trade. European demand showed continuous strength, but importers avoided long commitments and refused to accumulate stocks; while Argentine exporters and the Canadian and Australian pools refrained from pressing offers and allowed stocks to run high. Speculative activity was limited. Wheat prices accordingly moved within a narrow range, and displayed firmness in the face of heavy shipments, large visible supplies, and an underlying statistical position which continued comparatively easy.

During April–July, international trade promises to continue large, though lighter than in December–March; August 1 stocks seem likely to be unusually large in Canada, Argentina, Australia, and afloat, but fairly low in Europe; and wheat prices will probably be governed chiefly by new-crop developments. Early indications point to increases in harvested acreage and good crops in 1927, except in India and North Africa. In North America and Europe the winter was mild and damp; winter-killing was small; the winter-wheat condition around April 1 was reported better than usual; and ample moisture is available for spring-sown grain. Developments thus far suggest that European crops will be larger than last year and the Northern Hemisphere crop (ex-Russia) as large as last year's or larger; but it is too early to make reliable forecasts.

STANFORD UNIVERSITY, CALIFORNIA

May 1927

W H E A T S T U D I E S

OF THE

FOOD RESEARCH INSTITUTE

The central feature of the series is a periodic analysis of the world wheat situation, with special reference to the outlook for supplies, requirements, trade, and prices. Each volume includes a comprehensive review of the preceding crop year, and three surveys of current developments at intervals of about four months. These issues contain a careful selection of relevant statistical material, presented in detail in appendix tables for reference purposes, and in summary form in text tables and charts.

Each volume also includes six special studies bearing on the interpretation of the wheat situation and outlook or upon important problems of national policy. Typical subjects are listed on the fourth cover page of this issue.

The series is designed to serve the needs of all serious students of the wheat market, in business, government, and academic circles, by summarizing and interpreting basic facts and presenting current developments in due perspective.

The ten issues of Volume III will be published monthly from November 1926 to September 1927, except in April 1927. Ordinarily each issue will reach subscribers in North America early in the month designated. The subscription price for the volume, including a temporary binder, is \$10.00. Individual issues may also be purchased separately. Address: Food Research Institute, Stanford University P.O., California. European subscriptions, at £2 2s., will be accepted by the Northern Publishing Co., Ltd., 16, Fenwick Street, Liverpool, England.

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The Food Research Institute was established at Stanford University in 1921 jointly by the Carnegie Corporation of New York and the Trustees of Leland Stanford Junior University, for research in the production, distribution, and consumption of food.

SURVEY OF THE WHEAT SITUATION

DECEMBER 1926 TO MARCH 1927

The present survey covers the second third of what may be called the international crop year. During this season interest centers principally upon the movement of wheat in international trade and its relation to the course of prices. The broad facts respecting the year's production are fully known when the harvest of the Southern Hemisphere crops is nearly complete in January, and new-crop developments are of minor significance until March. This year no marked changes in crop estimates were reported in this period; but the first official estimate of Soviet Russia's crop, published in February, showed the high figure of 810 million bushels. If this figure is correct, the world wheat crop of 1926 was second only to that of 1915. Even excluding Russia, the crop was the largest since the war except for the bumper yield of 1923. All of the great exporting countries harvested good wheat crops, but European importing countries generally had mediocre crops of wheat, rye, and potatoes.

The features of outstanding interest during December-March were the exceptionally large volume of international trade and the stability and firmness of wheat prices in the face of this heavy movement and a comparatively easy international statistical position. During much of the preceding four-month period international trade was of moderate volume in relation to the large import requirements for the year; importers bought with restraint, especially from overseas, in the expectation of lower import prices when ocean freight rates should decline from the abnormally high levels of October-November. Ocean freight rates declined after mid-November—on the North Atlantic routes to normal seasonal levels, on longer routes considerably less; and international trade became extraordinarily

heavy during the winter. But exporters, particularly the Canadian and Australian pools, did not press their offers in view of import requirements known to be heavy and a price level already relatively low; the ocean freight situation tended to restrict shipments from the Southern Hemisphere; and importers avoided intensive purchases and long commitments. Hence wheat prices, though lower in import markets than in October, suffered no marked decline from late November levels. Stocks remained high in the major exporting countries, particularly in Canada and the Southern Hemisphere, but moderate to low in Europe.

International trade in wheat during April-July promises to be less heavy than in December-March, but heavier than in August-November. For the year ending in July the gross volume will probably exceed 800 million bushels, and net exports will approach this figure.

August 1 stocks will probably prove unusually high in Canada, Russia, and the Southern Hemisphere; moderate in the United States; and below average in Europe. World wheat prices, now at moderate levels, will be subject during the spring and summer mainly to new-crop developments, both directly and through their bearing on merchandising policies of exporters and importers.

The early prospects for new crops are generally favorable, except in India and North Africa, where the crops soon to be harvested appear fairly small. With a larger planted acreage, a mild winter, probable small abandonment, and ample supplies of moisture, winter-wheat prospects are generally better than at this time last year in Europe and about as good in the United States; but we can hardly count upon as favorable future progress as Ameri-

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can winter wheats experienced last year. Moisture supplies are ample in the North American spring-wheat belt, though seeding is delayed. Broadly viewed, the present outlook is that the next world wheat crop will be larger than that of 1926 in importing countries, and perhaps in the world (ex-Russia) as a whole. Pronounced injury to winter-wheat crops in the United States and/or Europe will presumably tend to

raise prices somewhat; but if further developments should bear out the favorable early promise, prices may be expected to weaken before the end of the present crop year in July. Since representative American wheats are not far from a domestic basis, and since winter-wheat conditions are especially subject to change, price fluctuations will probably be greater in American markets than elsewhere.

I. SUPPLY AND DEMAND FOR THE CROP YEAR

By the end of March the international supply position is well defined. Harvests are everywhere completed; crop estimates for most countries have been issued; and revisions of earlier estimates have clarified the situation. Minor uncertainties of course remain; but major uncertainties respecting the year's supplies have been removed.

During December-March 1926-27, changes in the supply situation have generally been of slight significance. Reductions in estimates of wheat production in certain areas have been counterbalanced by increases in others, though estimates of rye production in Europe, where this is an important substitute for wheat, have been somewhat reduced. The extent of demand for the crop year, at any time more difficult to evaluate, remains somewhat more uncertain. Available evidence, however, does not suggest the need for extensive alterations in our December calculations of probable net imports and exports for the crop year; and the calculations of other students of the situation at present agree fairly closely with our December estimates. In our judgment the statistical position for the year has not materially changed and remains moderately easy.

THE SUPPLY POSITION

Estimates of wheat production in the major exporting areas were for the most part maintained or increased during December-March. The United States official crop estimate was reduced from 840 to 832 million bushels in December. The Canadian estimate was maintained at 406 million bushels in January, and later raised to

410 million bushels when census data on acreage became available for Saskatchewan. The Australian official estimate was raised in January from 154 to 164 million bushels, the Argentine from 215 to 223 millions. Estimates of output in India and North Africa remained practically unchanged, but a decrease of 7 million bushels was reported in January for Jugo-Slavia. All told, Russia excluded, decreases of some 15 million bushels were more than counterbalanced by increases. The first official estimate of Soviet Russia's wheat production, appearing in February, placed the crop at the high figure of 810 million bushels; and the estimate of production in 1925, formerly placed at from 577 to 635 millions, was raised to 713 millions. These figures compare favorably with the pre-war 1909-13 average of 759 million bushels for the present territory. The significance of the Russian estimate for world trade, however, is limited by the continuance of forces restricting Russian wheat exports.

Among the importing countries of Europe, the only notable change was the reduction of the German estimate in December from 103 to 95 million bushels; small increases in some countries about offset decreases in others.¹ As usual, little is known about output in ex-European importing countries; but no marked changes have been noted since December 1. Apart from Russia, therefore, the wheat crop output of 1926 appears practically the same as it appeared in December, with slightly less in Europe and slightly more in the Southern Hemisphere.

¹ The reduction in March of 10 million bushels in the Spanish estimate is of minor importance.

We see no reason to believe that subsequent developments will necessitate considerable alterations in current estimates. Trade comments mention Australian, European, and Canadian estimates as too high, the United States and Argentine as too low; and the Russian is of course problematical. Such changes as may subsequently appear necessary seem likely to be both small and compensatory.

The latest available statistics of wheat production for 1926 and previous years are summarized in Table 1. The world wheat

far been, and promise to continue to be, characteristic of the crop year.

The quality of 1926 crops was probably on the whole superior to that of 1925. In the United States hard winter wheat and much of the soft winter was excellent in quality and Pacific white good, though hard red spring, durum, and the late-harvested soft red winter wheats were mediocre to poor. Canada had a heavy proportion of tough and damp grain and little of the higher grades; but the tough grain has proved generally satisfactory when dried,

TABLE 1.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING AREAS, 1920-26*

(Million bushels)

| Year | India | North Africa | United States | Canada | Soviet Russia | Lower Danube ^a | Other Europe | Northern Hemisphere ex-Russia | Australia | Argentina | World ex-Russia ^b |
|--------------|-------|--------------|---------------|------------------|------------------|---------------------------|------------------|-------------------------------|-----------|-----------|------------------------------|
| 1920..... | 378 | 63 | 833 | 263 | ... | 173 | 775 | 2,543 | 146 | 156 | 2,893 |
| 1921..... | 250 | 99 | 815 | 301 | 172 ^c | 212 | 1,004 | 2,733 | 129 | 191 | 3,109 |
| 1922..... | 367 | 76 | 868 | 400 | 202 ^c | 229 | 815 | 2,809 | 109 | 196 | 3,163 |
| 1923..... | 372 | 107 | 797 | 474 | 327 ^c | 267 | 994 | 3,063 | 125 | 247 | 3,489 |
| 1924..... | 361 | 85 | 864 | 262 | 382 | 204 | 849 | 2,675 | 165 | 191 | 3,082 |
| 1925..... | 331 | 105 | 676 | 433 ^d | 713 | 305 | 1,096 | 2,998 ^e | 113 | 191 | 3,357 ^e |
| 1926..... | 325 | 91 | 832 | 410 | 810 | 293 | 928 ^c | 2,929 ^e | 164 | 223 | 3,371 ^e |
| Average | | | | | | | | | | | |
| 1909-13..... | 352 | 92 | 690 | 197 | 759 | 330 | 1,018 | 2,725 | 90 | 147 | 3,005 |
| 1920-25..... | 343 | 89 | 809 | 356 ^d | ... | 232 | 922 | 2,803 ^e | 131 | 195 | 3,182 ^e |

* Compiled from official data, as published by U.S. Department of Agriculture.

^a Hungary, Bulgaria, Rumania, Jugo-Slavia.

^b Excluding China, Turkey in Europe, Brazil, and a number of small producers.

^c Excluding Transcaucasia and Turkestan.

^d Includes officially reported apparent underestimate of 21.8 million bushels.

^e Partially estimated.

crop, exclusive of Russia, appears about 120 million bushels smaller than that of 1923, but larger than in any other year since the war. With Russia included, however, it was apparently the largest crop of post-war years, some 110 million bushels larger than the next largest crop, that of 1925. Crops in the Northern Hemisphere, Russia excluded, exceeded all other post-war crops except 1923 and 1925; Russia included, 1926 crops were the largest since the war. Production was heavier than usual in exporting countries, notably the Southern Hemisphere, where the crop of 1926 was the largest in history. European importing countries, however, reaped harvests smaller than those of 1921, 1923, and 1925, though by no means poor crops. Large import requirements and export surpluses, heavy international trade, and large carryovers have thus

and the proportion of rejected grades has this year been smaller than last. Early-harvested grain in Australia was excellent, later-harvested grain rather poorer; an average weight per measured bushel lower than that of last year appears to have been compensated for by desirable dryness. The Argentine crop, heavy in weight but not particularly high in protein content, was far superior to last year's. In North Africa quality was rather poor. In Europe variations in quality were considerable; in France it was far better this year than last, in other southern European countries about as good, but in central and northern countries, notably Germany, poorer. Except in some parts of Hungary, Bulgaria, and Jugo-Slavia, crops in the Danube basin were of poor quality. The Russian crop is reported as better in quality this year than last,

though much of it was damp. Although exact comparisons of average quality for the world crop are impossible, it appears that the 1926 crop as a whole was better in quality than that of 1925, principally on account of the great improvement in the Argentine product.

Since European demand for wheat depends somewhat upon the availability of wheat substitutes, Table 2, which summa-

TABLE 2.—PRODUCTION OF CEREALS AND POTATOES IN EUROPE (EX-RUSSIA), 1920-26*

(Million bushels)

| Year | Wheat | Rye | Potatoes | Corn | Barley | Oats |
|----------------|--------------------|-----|--------------------|------|--------|-------|
| 1920 | 947 | 533 | 3,351 | 498 | 544 | 1,412 |
| 1921 | 1,216 | 758 | 3,078 | 373 | 560 | 1,453 |
| 1922 | 1,044 | 713 | 4,803 | 404 | 594 | 1,481 |
| 1923 | 1,261 | 826 | 3,864 | 452 | 662 | 1,760 |
| 1924 | 1,053 | 650 | 4,202 | 576 | 570 | 1,579 |
| 1925 | 1,401 | 938 | 4,743 | 604 | 688 | 1,733 |
| 1926 | 1,220 ^a | 752 | 3,830 | 643 | 686 | 1,891 |
| Average | | | | | | |
| 1909-13 . . . | 1,348 | 976 | 4,158 ^b | 581 | 694 | 1,862 |
| 1920-25 . . . | 1,154 | 736 | 4,007 | 484 | 603 | 1,570 |

* Official estimates, here chiefly as compiled by the U.S. Department of Agriculture, representing production in 27 countries for wheat, 24 for rye, 25 for potatoes, 10 for corn, and 25 for barley and oats. The figures are not complete, but cover the great bulk of the European production.

^a Including an estimate for Ireland.

^b Portugal not included as for later years.

rizes the European (ex-Russian) production of cereals and potatoes, is pertinent. During January and February unusual emphasis was placed by American traders on so-called shortage of rye and potatoes in Europe; a bullish argument respecting wheat prices was advanced on the ground that this shortage, at least in rye, had become increasingly noticeable. There is something in this argument, for in December both crops were reported much lower than the large crops of 1925. Nevertheless one must recall that by mid-December the statistical data indicated that European crops of feed grain—corn, barley, and oats—were the largest since the war;¹ and later figures have not altered the situation ap-

¹ See WHEAT STUDIES, January 1927, III, 146.

² In Germany, and probably in most European countries north of the Alps, only 30 per cent of the potato crop is used as human food.

preciably. In December reports from 21 European countries indicated a rye crop of 762 million bushels as compared with 918 million in 1925 and 716 for the 1920-25 average. By April 1 reports from 24 countries showed a 1926 crop of 752 million bushels as against 938 million in 1925 and 736 for the 1920-25 average. Considerable reductions were made in the German and Polish estimates early in January. In Germany the rye position, which was exceptionally easy in 1925-26, is fairly tight. But the general significance of the reduced rye crop is easy to overestimate, especially in view of the heavy production of rye first reported from Russia in February (897 million bushels as compared with 816 million in 1925).

The European potato crop of 1926, reported in December at 3,839 million bushels for 25 countries as against 4,743 million bushels in 1925 and 4,006 for the 1920-25 average, appeared by April 1 as 3,830 million bushels for the same countries. The net change has thus been negligible; and the comparatively short crop is not of major significance in view of the extensive use of potatoes in Europe for animal feed and as a source of alcohol, and the possibility of substituting abundant crops of feed grain for these uses.² There are no reported complaints on the manner in which potatoes have withstood storage during the winter.

On the whole it does not appear that December-March changes in the supply situation have been particularly notable. As of April 1, supplies both of wheat and of wheat substitutes appear in the total for the crop year but slightly less abundant than as of mid-December. In our judgment the margin of exportable surpluses over importers' requirements has continued during January-March very nearly the same as when we wrote our last survey in mid-December, though with slightly lower supplies in Europe, slightly higher elsewhere. Statistical evidence provides no good reason to believe that the international position has become tighter during the past three months in any appreciable degree. We therefore see small justification for explaining the firmness of prices by reference to growing tightness in the fundamental

statistical position. Merchandising practices and the position of stocks have been the significant influences.

IMPORTERS' REQUIREMENTS

In our previous survey, prepared in December, we estimated probable total net imports for the crop year 1926-27 (August-July) at 780 million bushels, probable net exports at 790 million.¹ This estimate of international trade was considerably higher than the then current estimates of other students, but in general they have since brought their estimates broadly into line with our own. Broomhall's successive revisions are shown in Table 3. His figures of

TABLE 3.—BROOMHALL'S SUCCESSIVE ESTIMATES OF EXPORT SURPLUSES AND IMPORTERS' PURCHASES, 1926-27*

(Million bushels)

| Date of report | Available for export | Margin over importers' purchases | Importers' purchases | | |
|----------------|----------------------|----------------------------------|----------------------|--------|-----------|
| | | | Total | Europe | Ex-Europe |
| Aug. 10.... | 768 | 64 | 704 | 560 | 144 |
| Sept. 14.... | 816 | 112 | 704 | 576 | 128 |
| Nov. 2.... | 832 | 128 | 704 | 576 | 128 |
| Nov. 9.... | 856 | 152 | 704 | 576 | 128 |
| Dec. 14.... | 868 | 164 | 704 | 576 | 128 |
| Jan. 25.... | 868 | 148 | 720 | 600 | 120 |
| Mar. 22.... | 908 | 148 | 760 | 640 | 120 |

* Data from Broomhall's *Corn Trade News*.

March 22 closely approximate our December estimates, so far as estimated shipments may be said to approximate estimated net imports. His figure for shipments to Europe, 640 million bushels, now stands at our December figure for European net imports, and his estimate of shipments to ex-Europe, reduced from 128 to 120 million bushels, is roughly consistent with our December estimate of 140 millions. *The London Grain, Seed and Oil Reporter* estimate of total shipments was raised on March 4 from 696 million bushels (maintained since November 12) to 728 million bushels.

¹ See WHEAT STUDIES, January 1927, III, 165-170.

² *Foreign Crops and Markets*, March 14, 1927, XIV, 338, 349.

³ Monthly circular of Clement, Curtis & Co., Chicago, March 2, 1927.

⁴ See Appendix Table VIII.

The United States Department of Agriculture on March 14 increased its estimates of minimum and maximum net imports (for the crop year July-June) into Italy, Germany, and France from 165-210 to 195-230 million bushels.² Murray's estimates,³ appearing for the first time on March 2, were for 625 million bushels to Europe, 140 to ex-Europe, making a total of 765 million. Thus our December estimates still range somewhat above current estimates by other observers, but by no means so far above as was the case in December.

Future developments in trade and prices will certainly be affected by new-crop developments, and official data on international trade⁴ from the beginning of the crop year to April 1 are far from complete. Consequently we regard it as premature to suggest detailed revisions of the estimates of net imports appearing in our December survey. The volume of trade indicated by their total we continue to regard as a reasonable approximation—uncertain at best and subject to revision in the light of subsequently accumulated facts, as all such estimates must be. Certain possibilities may, however, be mentioned at this time. In view of high ocean freight rates on Pacific routes and the demoralization of business consequent to the civil wars in China, our estimates of ex-European net imports of 140 million bushels may prove slightly too high. But European net imports as a whole seem likely to exceed rather than to fall below our previous estimates. Certain countries of Europe, notably Germany and Italy, may import more than we have estimated, and France alone seems likely to take appreciably less.

PROBABLE NET EXPORTS

Somewhat more adequate information is available to justify minor revisions in our December estimates of probable net exports. Available evidence suggests that the total is likely to reach at least 795 million bushels, some 5 million more than we estimated in December. The United States, Canada, and Russia now appear likely to export more than we anticipated, while Argentina, Australia, India, and the Danube basin may export somewhat less. Our de-

tailed revisions, in comparison with the latest available estimates by Broomhall and the United States Department of Agriculture, appear in Table 4.

United States net exports (July-June), including shipments to possessions, will presumably reach 190 million bushels, 20 million more than we estimated in December. Net exports to the end of March had

TABLE 4.—FORECASTS OF PROBABLE NET EXPORTS BY EXPORTING COUNTRIES IN 1926-27*
(Million bushels)

| Exporting area | Broomhall | | U. S. D. A. | | F. R. I. | |
|----------------|-----------|---------|--------------------|---------|----------|---------|
| | Sept. 14 | Mar. 22 | Oct. 25 | Mar. 14 | Dec. 13 | Apr. 16 |
| United States | 168 | 184 | 180-220 | 195-220 | 170 | 190 |
| Canada | 272 | 272 | 270-300 | 275-300 | 290 | 295 |
| Argentina | 96 | 128 | ..... | 110-130 | 140 | 130 |
| Australia | 64 | 80 | ..... | 90-115 | 95 | 90 |
| Russia | 40 | 48 | ..... | 35- 45 | 40 | 45 |
| Danube basin | 40 | 32 | 30- 51 | 36- 52 | 40 | 35 |
| India | 16 | 8 | ..... | 5- 7 | 10 | 6 |
| Others | 8 | 8 | 5- 10 ^a | 4- 6 | 5 | 4 |
| Total | 704 | 760 | ..... | 750-875 | 790 | 795 |

* For crop year August-July, except U.S.D.A. estimates and F.R.I. estimates of United States exports, which are for the year July-June. Broomhall's figures are for probable shipments. Dots (.....) indicate items for which no estimate was made.

^a North Africa only.

already reached 165 million bushels, and during April-June some 20 million bushels in the form of durum, mixed grades, white wheats, and flour can be expected to pass into export channels, whether or not representative wheats are available. Broomhall, in a calculation based upon March 1 stocks,¹ discerns the possibility of exports of 60 million bushels between March 1 and June 30. The United States Department of Agriculture calculates exports of 195 million bushels (July-June) as the minimum, 220 million as the maximum. In our judgment these high figures are not justified if the official estimate of production is to be accepted. There is a possibility that United States prices may again approach a domestic basis, as they appear to have done during some weeks of the past four

months,² thus curtailing exports. As yet the accuracy of the production estimate cannot be judged adequately. Unless, however, either domestic disappearance or the carryover out should prove unexpectedly low, or the crop has been underestimated, it is difficult to see how exports can greatly exceed 190 million bushels. In our disposition table³ we have reduced the figure for domestic consumption (on the basis of a computation involving census data on per capita flour production, rates of extraction, and population) from 505 to 490 million bushels. The probable carryover we now estimate at 75 million bushels rather than 82.5 million; and minor changes have been made in the item for seed and the residual item for feed, waste, and invisible stocks. These items, calculated upon independent bases so far as possible, indicate roughly 190 million bushels for export.

With the prospect for an early opening of navigation on the Great Lakes and for a good foreign demand for strong grades of wheat, we increase our estimate of Canadian net exports from 290 to 295 million bushels in spite of unusually high stocks and the increased crop estimate on the one hand, and on the other the reported disposition of the Pool to market conservatively. Up to the end of March, 210 million bushels net had been exported, leaving about 85 million bushels for the ensuing four months. We anticipate a carryover larger than last year's, and assume that the figure for feed and waste, in view of the large quantity of damp grain, will exceed last year's.

In spite of an increase in the production estimate for Argentina (from 215 to 223 million bushels), net exports now appear more likely to approximate 130 than 140 million bushels. The combined requirements for seed, consumption, and feed and waste appear likely to approach 82 million bushels rather than the 73 million we estimated in December, since there is no evidence that the heavy December carryover of old-crop wheat of poor quality (33 million bushels) is being mixed with the new, and the presumption is that a larger proportion of this than we had expected will remain in Argentina. We have raised our estimate of the probable stocks on July 31

¹ *Corn Trade News*, March 15, 1927.

² See below, p. 283.

³ Appendix Table X.

in view of the probabilities that comparatively high ocean freight rates, competition of corn with wheat for tonnage, and European demand for strong rather than weak wheats, will restrict exportation to some degree. Our allocation of poor-quality, old-crop wheat to domestic use, in a larger proportion than to export or stocks on August 1, necessarily rests upon assumptions.

The increase in the estimate of Australian production from 154 to 164 million bushels increases available supplies by 10 million bushels. Nevertheless, since high freight rates, moderate ex-European demands, and the selling policy of the pools tend to reduce exports, we have lowered our December estimate from 95 to 90 million bushels. We assume unusually heavy stocks on August 1.

In our estimates of exports from the minor exporters—Russia, the Danube basin, India, and others—available evidence sug-

gests the desirability only of minor changes. We have reduced our figure for the Danube basin from 40 to 35 million bushels, because exportable surpluses appear to have been reduced to low dimensions by exceptionally heavy movement during September–November, and because much of the remnant is of too poor quality to be much in demand. Shipments, according to Broomhall, have been negligible since January. The prospects of supplies from Russia are uncertain. Stocks are reported as low in the Ukraine and North Caucasus, the principal export areas, but high in the more northerly districts. Numerous handicaps on export persist. Nevertheless we anticipate that Russia's net exports for the year will reach or exceed 45 million bushels. In view of low stocks and a mediocre new crop in India, and high freight rates from Karachi, we have reduced our estimate of India's net exports from 10 to 6 million bushels.

II. INTERNATIONAL TRADE, DECEMBER-MARCH

Developments in international trade during the past four months have been such as to strengthen our belief that our earlier expectation of exceptionally heavy trade during the crop year 1926–27 will prove well founded. The overseas movement of wheat and flour during December–March was of exceptionally large volume—larger than for any similar period of post-war years. This heavy movement more than compensated for the somewhat restricted trade in August–November; and the movement for the first two-thirds of the crop year now appears larger than in any other post-war year. December–March shipments from the Southern Hemisphere, though not remarkable in view of the record crop, were both heavy and well-maintained; and North American exports were also of unusual size. European countries, particularly on the Continent, bought freely under the stimuli of heavy import requirements, low stocks, improved exchange rates, and decreased ocean freight rates, and in spite of the failure of export prices to decline materially. But the policy of buying to fill immediate requirements rather than to replenish stocks prevailed until March, since

most importers anticipated lower prices than actually ruled. Purchases by ex-European countries were restrained by relatively high freight rates, and by the disruption of trade in China.

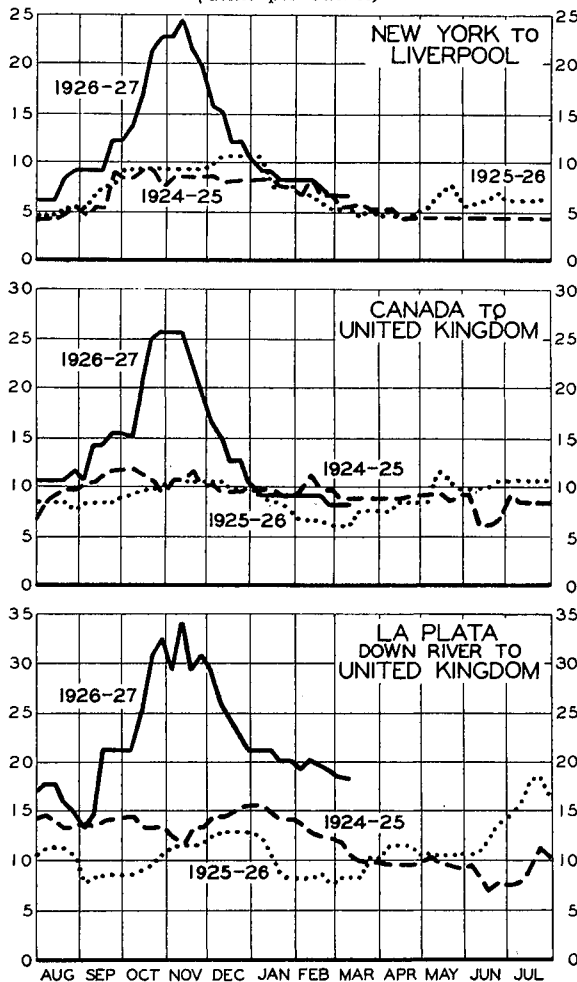
THE SITUATION IN OCEAN FREIGHTS

As we pointed out in our December survey, an extraordinary advance in ocean freight rates on grain tended to restrict import purchases during October and November. Importers, desirous of avoiding the incidence of increased transportation costs, sought supplies in near-at-hand sources, thus altering the direction of trade; and their expectation of lower c.i.f. prices when freight rates should fall led them to restrict overseas purchases. Hence stocks accumulated rather heavily in exporting countries, notably Canada, while stocks of import wheats apparently remained low. In recent months this influence on the movement of wheat has in large measure disappeared.

The course of ocean freight rates on wheat and corn on three important routes is shown in Chart 1 (p. 272). The spectacular advance beginning in mid-September cul-

minated in November, and the decline was rapid during December. By the beginning of January rates had reached their normal seasonal position on North Atlantic

CHART 1.—WEEKLY FREIGHT RATES ON WHEAT FROM VARIOUS EXPORTING CENTERS TO THE UNITED KINGDOM, FROM AUGUST 1924*
(Cents per bushel)



* Data from *International Crop Report and Agricultural Statistics*, converted from shillings and pence at current rates of exchange. New York-Liverpool rates are for parcels in liners; others for cargoes.

routes, and normal rates prevailed during the remainder of the period. But on long-voyage routes¹—from Australia, Argentina, and the Pacific Coast of North America—the decline was checked before the levels of previous years were reached. The heavy wheat crops in Australia and Argentina, together with a large volume of old-crop

¹ See Appendix Table VII.

maize in the latter country, created an urgent demand for space; and the diversion of tonnage to these routes curtailed the tonnage available in the North Pacific. The special diversion of tonnage to transport supplies to the British forces in China is reported to have had some effect in maintaining Australian rates. The relatively high freight rates on Australian and Argentine shipments were probably not such as to discourage purchasing by European countries where stocks were low; but such rates were probably not conducive to purchases calculated to build up stocks, especially since f.o.b. prices have not declined noticeably. Oriental importers, whose purchases are made largely from the Pacific Coast and Australia, have apparently found the freight situation somewhat discouraging, but other factors have been more important in restricting their purchases.

Minor features of the ocean shipping situation are of some interest. A dispute between owners and shippers regarding the terms of chartering agreements for Australian voyages dragged on until late in January. The early chartering of British vessels (the dispute did not involve vessels under other flags) to carry wheat was affected; and the volume of Australian shipments during January and February, though large, appears to have been somewhat restricted. It is reported that tonnage will not be plentiful for the transportation of Canadian wheat in the spring, since Argentine chartering for April and May has been unusually heavy. With navigation on the Great Lakes opening on April 15, a week earlier than usual and a month earlier than last year, rates on the Canada-United Kingdom route may increase for a period. But a moderate increase in rates is not likely noticeably to curtail the movement of Canadian grain.

VOLUME AND COURSE OF TRADE

Broomhall's data on international shipments of wheat and flour during December-March and August-March are summarized in Table 5 and Chart 2, together with comparable data for previous years. For both periods total shipments were larger than in any other post-war year.

The volume of the August-March movement considerably exceeded that of 1923-24, a year of heavier crop production and of lower prices; slightly surpassed that of 1924-25, a year when European crops were

TABLE 5.—INTERNATIONAL WHEAT AND FLOUR SHIPMENTS (BROOMHALL) BY DESTINATIONS*
(Million bushels)

| Year | December-March (17 weeks) | | | August-March (34 weeks) | | |
|---------|---------------------------|-----------|--------------|-------------------------|-----------|--------------|
| | Total | To Europe | To Ex-Europe | Total | To Europe | To Ex-Europe |
| 1920-21 | 181.4 | 164.9 | 16.5 | 355.6 | 326.9 | 28.7 |
| 1921-22 | 223.6 | 180.8 | 42.8 | 441.0 | 365.4 | 75.6 |
| 1922-23 | 225.9 | 196.0 | 29.9 | 444.7 | 385.2 | 59.5 |
| 1923-24 | 270.1 | 203.0 | 67.1 | 492.0 | 380.5 | 111.5 |
| 1924-25 | 272.0 | 242.1 | 29.9 | 527.0 | 470.5 | 56.5 |
| 1925-26 | 234.7 | 175.6 | 59.1 | 442.2 | 342.3 | 99.9 |
| 1926-27 | 299.1 | 252.8 | 46.3 | 531.9 | 449.1 | 82.8 |
| Average | | | | | | |
| 1909-14 | 189.9 | 161.9 | 28.0 | 406.5 | 353.0 | 53.5 |
| 1920-26 | 234.6 | 193.7 | 40.9 | 450.4 | 378.4 | 72.0 |

* Data from Broomhall's *Corn Trade News*.

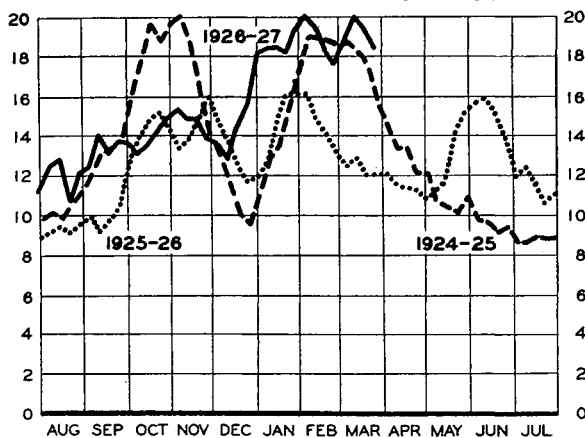
considerably smaller than those of 1926; and exceeded by nearly 90 million bushels that of 1925-26, a year of heavy European crops. The movement would undoubtedly appear still larger in contrast with previous years if data on net exports were available; for Broomhall's figures understate shipments by rail and up the Danube from eastern to central and western Europe,¹ particularly during October and November, when high ocean freight rates caused importers to seek supplies near at hand.

December-March shipments of this year, 299 million bushels, exceeded those of last year by 64 million bushels, and surpassed 1923-24 and 1924-25 shipments for corresponding periods by over 25 million. The December-March rather than August-November shipments have been impressively large this year, and have been responsible for the size of the August-March total. The mid-winter movement, as is shown in Chart 2, attained large volume earlier this year than in 1924-25 and 1925-26, chiefly because of the movement of early-harvested Southern Hemisphere crops of the largest size in recent years; and the large volume

¹ Broomhall recorded on March 29 some 2.6 million bushels shipped by rail and water from North Russia, and these figures are apparently not included in his weekly data summarized in Table 5.

was maintained longer than usual. Three times during the period weekly shipments

CHART 2.—INTERNATIONAL SHIPMENTS OF WHEAT AND FLOUR, WEEKLY FROM AUGUST 1924*
(Million bushels; 3-week moving average)



* Broomhall's data, from the *Corn Trade News*.

exceeded 21 million bushels, the highest figures since the autumn of 1924.

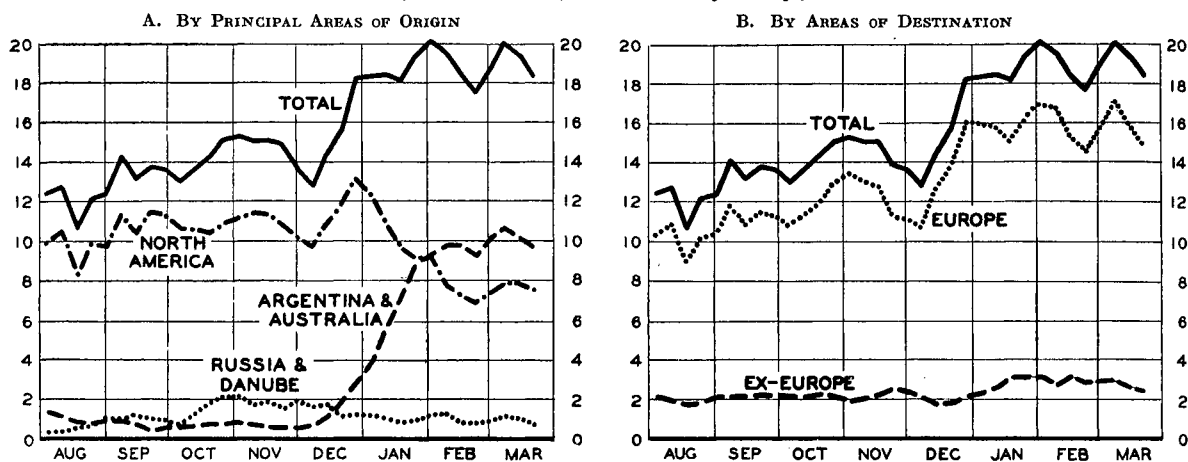
IMPORTS AND THEIR DISTRIBUTION

The distribution of shipments between European and ex-European destinations is shown in Table 5 and Chart 3B (p. 274). Ex-European takings, 83 million bushels from August to March, were by no means small, though lower than in 1923-24 and 1925-26, when 112 and 100 millions were shipped. These differences are not easy to explain in view of the scanty information on production and stocks in ex-European countries. Lower prices in 1923-24 than in 1926-27 partially account for the smaller shipments this year, since ex-European countries are decidedly price-sensitive. But with lower export prices in 1926-27 than in 1925-26, ex-European countries have thus far imported less this year than last. High freight rates, which have persisted longer on long-voyage routes than on short, have probably been influential in curtailing purchases in the Orient, and smaller imports in 1926-27 than in 1925-26 were to be expected in view of larger Japanese stocks on hand at the beginning of this year. The effect of the wars in China, by disrupting normal trading relations especially with Japanese millers, has apparently been to curtail Oriental

imports considerably. When the heavy movement from the Southern Hemisphere began in January, ex-European shipments increased in volume (the December–March total was 46.3 million bushels as against 36.5 million for August–November). In view of large supplies in the Southern Hemisphere the increase appears likely to be maintained during April–July, especially if prices do not rise.

Shipments to the Continent were much larger than in any other year, while the United Kingdom appears to have taken no more than usual. The contrast is somewhat obscured by the “orders” shipments; but Broomhall reports that an unusually large proportion of these has been taken by the Continent. It is difficult to say, in the absence of up-to-date official statistics of net imports, which countries of the Continent

CHART 3.—INTERNATIONAL SHIPMENTS OF WHEAT AND FLOUR, WEEKLY, AUGUST–MARCH 1926–27*
(Million bushels; 3-week moving average)



* Broomhall's data, from the *Corn Trade News*.

Shipments to European destinations for August–March were larger than in any year except 1924–25, when European crops were much smaller. Even this difference would be much reduced if Broomhall's data were more complete for Danubian and Russian exports. December–March shipments to Europe were about 11 million bushels larger even than those of 1924–25, and over 77 million bushels above last year's. The large quantities shipped to Continental destinations have been especially striking, as the following figures indicate:

| Year | August–March (34 weeks) | | | December–March (17 weeks) | | |
|----------|-------------------------|--------------|-----------|---------------------------|-------------------|-------------------|
| | To United Kingdom | To Continent | To Orders | To United Kingdom | To Continent | To Orders |
| 1923–24. | 118.4 | 196.9 | 65.2 | 59.1 ^a | 99.3 ^a | 44.5 ^a |
| 1924–25. | 112.6 | 232.4 | 125.5 | 46.1 | 118.4 | 77.6 |
| 1925–26. | 104.1 | 166.5 | 71.7 | 54.1 | 72.1 | 49.4 |
| 1926–27. | 111.3 | 247.4 | 90.4 | 57.1 | 130.2 | 65.5 |

^a Distribution partially estimated.

have been the most active purchasers. Trade reports, however, mention large purchases by Italy, Germany, Belgium, the Netherlands, and northerly countries generally, while French purchases appear to have been somewhat restricted.

Much has been said by American traders with bullish inclinations during January and February about the unusual strength of European demand, and emphasis has been placed upon the firmness of futures prices (up to March 5) in spite of the unusually heavy shipments. Unquestionably the demand of Europe for foreign wheat was strong: crops were mediocre and requirements heavy. But arrivals of wheat in Europe lag behind shipments, from six to ten weeks when the bulk of the shipments is provided by the Southern Hemisphere. Indications during January and February of shortage of readily available wheat—low port stocks in both the Continent and England, and the absence of quotations for spot

wheat at Liverpool—were to be expected in view of restricted shipments in August–November.

Arrivals during January–February were readily absorbed; and it was not until heavier arrivals in March began to exert pressure that prices responded as they might have been expected to respond to heavier shipments earlier in the period. It would appear that heavy shipments affect the course of prices differently as readily available stocks are more or less ample to fill current requirements. The significant question for the movement of prices is at present the absorption of arrivals that have only recently become large. But the rate of European absorption is at this time of year considerably influenced by the prospects for domestic crops, and hence difficult to foresee.

SOURCES OF EXPORTS

Broomhall's data on export shipments by areas during December–March, together with net export data for the United States and Canada, are summarized in Table 6.¹

Canada furnished roughly three-fourths, the United States one-fourth. For the season as a whole, Canadian net exports August–March have totaled about 210 million bushels out of a crop and inward carryover of 445 million. Last year, with a crop and carryover of 459 million bushels, net exports from August to March were 240 million bushels. Neither the December–March nor the August–March movement of Canadian wheat has been especially rapid this year, and a relatively large proportion of the crop remained in Canada on April 1. Because of relatively high ocean freight rates and the disruption of trade in China, exports from Canadian Pacific ports have this year fallen off. It is probable that the relatively slow exportation of Canadian wheat has been due in part to the selling tactics of the Pool.

Argentine and Australian shipments, at 61 and 49 million bushels respectively during December–March, have been of good volume, much larger than last year, when crops were much smaller, but smaller than in 1924–25, when crops were 31 million bushels smaller than this year's. With the

TABLE 6.—INTERNATIONAL SHIPMENTS AND NET EXPORTS OF WHEAT AND FLOUR FROM PRINCIPAL EXPORT AREAS, DECEMBER-MARCH, 1920-27*

(Million bushels)

| Dec.-Mar. | International shipments (Broomhall) | | | | | | | Net exports from | |
|--------------|-------------------------------------|---------------|-----------|-----------|----------------|-------|-------------------|------------------|--------|
| | Total | North America | Argentina | Australia | Russia, Danube | India | Other | United States | Canada |
| 1920-21..... | 181.4 | 128.3 | 16.3 | 28.2 | 0.3 | 8.3 | 0.0 | 75.1 | 75.1 |
| 1921-22..... | 223.6 | 119.5 | 50.9 | 44.6 | 1.4 | 0.0 | 7.2 | 46.3 | 65.8 |
| 1922-23..... | 225.9 | 139.8 | 53.0 | 24.8 | 1.5 | 6.6 | 0.2 | 47.9 | 84.3 |
| 1923-24..... | 270.1 | 159.6 | 55.9 | 33.3 | 15.4 | 0.6 | 5.3 | 33.3 | 117.0 |
| 1924-25..... | 272.0 | 117.0 | 66.2 | 60.3 | 11.4 | 15.1 | 2.0 | 62.4 | 61.9 |
| 1925-26..... | 234.7 | 128.8 | 33.1 | 41.3 | 7.6 | 0.0 | 23.9 ^a | 21.2 | 116.4 |
| 1926-27..... | 299.1 | 159.3 | 61.0 | 49.3 | 19.0 | 0.3 | 10.2 | 41.5 | 100.6 |

* Shipments are for 17 weeks, from Broomhall's *Corn Trade News*. Net exports are official data.

^a Includes shipments from Hungary and Germany.

Chart 3A (p. 274) shows the course of shipments since the beginning of the year.

Rather more than half of the total shipments have been supplied by North America—a relatively smaller proportion than in any earlier year except 1924–25, when the Canadian crop was short. Of the 159 million bushels shipped from North America,

largest Southern Hemisphere crop in history, harvested from one to three weeks early, the December–March movement might have been expected to be the largest since the war. In December 1924, Argentina was still shipping fairly good quantities from the bumper crop of 1923; but this year, though the carryover from the 1925 crop was large in December, it was of undesirable quality, and shipments in December

¹ See also Appendix Tables VIII and IX.

were small. This, and appreciation in the Argentine exchange, account in part for the smaller shipments this year as compared with 1924-25, but another factor was somewhat lighter shipments from Australia in January and February this year as compared with 1925. During these months Australian exports were slightly delayed by restrained offers by the pools and the dispute between owners and shippers regarding chartering terms. Relatively high freight rates from both countries probably restricted exports slightly. These obstructions prevented a record movement for the season, but were not of sufficient effect to prevent much heavier shipments than usual. Heavy shipments are to be expected from both Argentina and Australia during April and May, and from Argentina in June, if the course of exportation during years of similarly large crops provides a criterion.

Russia and the Danubian countries exported more freely in December-March this year than in any other year since the war. Most of the shipments seem to have originated in Russia, since the Danubian countries apparently shipped only small amounts after the first of the year.¹ Surpluses in these countries were largely exported during September-November. Demand for the remain-

ing surpluses of mediocre-quality wheat has not been pressing; and Roumanian exports have been hindered by appreciation of the leu. Exports from this region are likely to continue small. The Russian crop, however, was officially reported at a considerably higher figure than was expected; in January it was reported that 50 per cent of the crop remained in farmers' hands; and the existence of large stocks appears indisputable. The location of heavy stocks, however, is apparently not in easily accessible exporting regions of the Ukraine and North Caucasia, but in Siberia. Whether or not exports will increase materially depends upon the willingness of peasants to part with their grain as well as the facilities for handling it—both uncertain factors.

Indian shipments in December-March have amounted to less than half a million bushels, and Broomhall reports 1.1 million shipped from Australia to India during January-March. Crop prospects for the March-May harvest have been mediocre to poor. It appears that little will be available for export from the new crop, though small shipments are likely to be made after harvest. High ocean freight rates, however, promise to restrict the movement of the small quantities available.

III. MARKETING AND STOCKS

Data on the movement of wheat from farms to central markets are for most countries so meager, and stocks occupy so many positions, that a generalized view either of the marketing movement as a whole or of world stocks at the end of March is difficult to obtain. So far as can be ascertained, marketing by farmers during December-March has presented few noteworthy features; the movement has been normally rapid in the Southern Hemisphere, Canada, and most countries of Europe, but somewhat retarded in the United States.

Total stocks available for domestic use, export, and carryover are unquestionably larger than usual in the exporting areas dis-

tant from Europe (India excepted), notably in the Southern Hemisphere and Canada. In Argentina and Australia the harvesting of unusually large crops was followed by exportation only normally heavy, size of crops considered. In Canada rapid marketing early in the crop year, early closing of navigation, and restricted selling by the Pool caused an accumulation of stocks unusually heavy, unless the crop has been underestimated, which appears unlikely. Stocks in the United States are high by comparison with the two preceding years. In Russia the reported heavy accumulations at railway stations in Siberia, and in the hands of richer peasants in the northerly regions, appear reasonable in view of the large crop and heavy carryover into 1926-27; but these do not spell heavy future ex-

¹ Broomhall's data show 1.7 million bushels shipped in December-March as against 5.2 million for August-November. Both figures understate net exports.

portation. In the Danube basin, Roumania excepted, stocks are not large, and in all four countries quality is poor. In India, Algeria, and Tunis, all of which have been importing wheat, stocks are presumably quite low, even for the season of the year.

In European importing countries as a whole stocks of imported wheat continue rather low; and in most countries domestic wheats, having been drawn upon heavily in September–December, are probably not available in considerable volume. Heavier arrivals of foreign wheat, beginning in March when the large shipments of January first reached Europe, promise to build up stocks of import wheats if the millers do not grind more freely than is expected.

MARKETING AND COUNTRY STOCKS

The rate of movement of wheat from farms is ordinarily not of great significance during the December–March period, and is for most countries not susceptible of statistical measurement. In the Southern Hemisphere, where most of the wheat is handled in bags and stored in sheds rather than in elevators, the movement is necessarily rapid, and is subject to major variations only as crops are harvested early or late and differ in size. Australian marketing has of late years been hastened by more extensive use of motor trucks and by improved railway operation. In western Europe there is ordinarily a period of fairly heavy marketing in the weeks preceding spring planting, when farmers are free to proceed with the threshing of grain stored in barns. In the United States and Canada the mid-winter movement is usually comparatively small and varies but little from year to year.

European marketing, so far as can be determined from the meager evidence, has presented few distinctly noteworthy features. In October and November British farmers marketed freely under the stimulus of attractive prices induced by high ocean freight rates. At the end of November 9.5 million bushels were reported out of farmers' hands as against almost the same amount in 1925, from a larger, better crop. In subsequent months deliveries were relatively slower, and by the end of March only 18.3 million bushels had been marketed as

against 20.1 million last year. Stocks remaining in farmers' hands are probably fairly low; and in recent weeks trade journals have commented not only upon the generally poor quality of winter receipts, but also on the probability of an overestimated crop.¹ In Germany the movement from farms appears to have been of small dimensions in view of the mediocre crop, though offerings were more liberal in March. Country stocks are reported to be low. In France marketings, previously retarded because of fall weather unfavorable for sowing and the prospective reimposition of the full duty on January 1, 1927, were liberal after January as farmers were free from field work and new-crop prospects appeared good. This contributed to a decline in prices. It is reported that marketing was freest in areas where crops were relatively satisfactory, so that by the end of February farm stocks were unusually low in these districts, though not in others. In Italy marketing followed its usual course, most of the wheat having left the farms early in the crop year. In the Russian collecting campaign much more wheat has been obtained this year than in 1924–25 and 1925–26, though a decline was observed commencing in late December. Stocks in the hands of richer peasants in the northern districts were reported to be large in early February,² but holders were dissatisfied with current low prices, and heavy snows and poor roads hindered transportation. In Siberia and other northerly regions, shortage of railway cars is reported to have caused heavy accumulations of grain at railway stations.

Little is known of marketing and stocks in other countries. Polish supplies early in March were so low that imports of wheat and rye to the value of 45 million zloty were thought to be necessary before the new crop could be harvested.³ In Hungary and Jugoslavia domestic supplies were probably reduced to a low level by January, since August–December exports were unusually heavy. In Roumania, however, stocks are

¹ *London Grain, Seed and Oil Reporter*, March 4, 1927.

² *Foreign Crops and Markets*, February 28, 1927, XIV, 267.

³ *Weekly Revue du Marché* of J. A. Goldschmidt & Co., Paris, March 16, 1927.

apparently high. Exports have been light throughout the year on account of the appreciating exchange and difficulties in transportation; and farmers appear not to have sold freely on account of unsatisfactory prices for their poor-quality wheat.

In the Southern Hemisphere the movement from farms appears to have been normally rapid. Australian visibles rose from 2 million bushels on December 1 to 81 million on January 1; about half of the crop passed from the farms within a month, largely because of the early harvest.¹ Subsequently it was reported that farmers as well as the pools were holding wheat in the expectation of higher prices. For Argentina only fragmentary data are available; but reports of congestion on railways and in ports as well as the high visible indicate normally heavy movement from farms, beginning somewhat earlier than usual. In both countries stocks remain high despite heavy exports, since the crops were unusually large. The Argentine exportable surplus on March 25 was officially estimated at 110 million bushels, an exceptionally high figure. Part of the Argentine supplies, as is indicated by the estimated exportable surplus of 33 million bushels on December 31, consists of low-quality old-crop wheat. How far this wheat has been mixed with new wheat is not strictly determinable, but probably little has been so used if the absence of comment by importers is significant.

Farmers in the United States have marketed slowly by contrast with preceding years. From July 1 to April 1 this year 349

million bushels were received at primary markets.² Last year, when the crop was some 156 million bushels smaller, receipts for the same period were 301 million; and in 1924-25, when the crop was only 32 millions larger, receipts at 457 million were 108 million larger than this year. Though the data on receipts at primary markets are incomplete in that marketings on the Pacific Coast are not considered, and in other respects as well, the evidence suggests that this year comparatively low prices combined with improved financial conditions have led farmers to hold their wheat. As compared with 1924 and 1925, December marketings were most restricted. In February and March they became comparatively more liberal, though still small in absolute amount. Stocks on farms, officially reported at 130 million bushels on March 1 as compared with 100 and 112 million bushels in 1926 and 1925 respectively, point to the same conclusion. Stocks in country mills and elevators were also high by contrast with the two preceding years. If commercial visibles are included, it appears that stocks of wheat in all positions available for domestic use, export, and carryover were higher on March 1 this year than in the two preceding years, but lower than in all other post-war years except 1922.³

Canadian marketings⁴ during December-March this year fell somewhat below those of last year, though up to the end of November receipts at Fort William and Port Arthur (151 million bushels) were almost exactly the same as in 1925-26. A notable decline occurred in December, when receipts were but 26.3 million bushels as against 53.5 million in 1925, as a result of severe weather and the accumulation of stocks of damp grain at the ports. By April 1, August-March receipts at Fort William and Port Arthur totaled 206 million bushels as against 223 million last year, indicating a movement about as rapid this year as last when the size of crops is considered.⁵

VISIBLE SUPPLIES

The course of visible supplies during the last three years appears in Chart 4 (p. 280). Supplementary data on commercial stocks

¹ See Appendix Table IV. The Australian visible figures sometimes include data from all states, sometimes not. The high figure for this year, however, indicates clearly that marketing was rapid.

² See Appendix Table II.

³ See Appendix Table VI.

⁴ See Appendix Tables II and III.

⁵ The comparatively smaller receipts this year, together with similarly smaller receipts at country elevators (some 294 million bushels August-March as against 312 millions last year) have been regarded by some as evidence of an overestimate of this year's crop, estimates of 411 million bushels for 1925 and 406 for 1926 being accepted. But an apparent underestimate of the 1925 crop by 21.8 million bushels has been indicated by the Dominion Bureau of Statistics (*Monthly Bulletin of Agricultural Statistics*, January 1927, p. 23). This would bring the 1925 estimate to 433 million bushels, a figure which we accept until an authoritative revision appears.

of wheat and flour as of March 1, 1920-27, are summarized in Table 7.¹

Total visibles have run much higher than last year, when the United States crop was much smaller; about as high as in 1924-25 (after mid-December, when shipments from the Southern Hemisphere increased); and slightly lower than in 1923-24,² when

TABLE 7.—SUMMARY OF PRINCIPAL ITEMS IN WORLD VISIBLE SUPPLIES, MARCH 1, 1920-27*

(Million bushels)

| March 1 | United States | Canada | United Kingdom | Afloat | Total |
|--------------|---------------|--------|----------------|--------|-------|
| 1920..... | 98.8 | 31.0 | 10.2 | 64.6 | 204.6 |
| 1921..... | 67.9 | 48.1 | 21.4 | 55.0 | 192.4 |
| 1922..... | 83.1 | 63.1 | 4.1 | 55.7 | 206.0 |
| 1923..... | 119.4 | 87.9 | 8.2 | 58.6 | 274.1 |
| 1924..... | 122.8 | 127.6 | 4.6 | 65.7 | 320.7 |
| 1925..... | 125.0 | 84.3 | 11.0 | 85.8 | 306.1 |
| 1926..... | 96.4 | 111.9 | 7.4 | 50.4 | 266.1 |
| 1927..... | 104.3 | 116.7 | 4.2 | 70.1 | 295.3 |
| Average | | | | | |
| 1910-14..... | 92.2 | 38.0 | 12.6 | 45.0 | 187.8 |
| 1920-26..... | 101.9 | 79.2 | 9.5 | 62.2 | 252.8 |

* From Broomhall's *Corn Trade News* and the *Daily Trade Bulletin*. See also Appendix Table IV.

the Canadian crop was larger. Visibles in 1923-24 and 1924-25 were, however, exceptionally high in comparison with the pre-war period and the earlier post-war years, so that 1926-27 visibles may be regarded as higher than usual.

United States visibles (Bradstreet's) have remained well above last year's figures on account of the larger crop. In December and January, however, the effect of restricted marketing by farmers was noticeable. Since the winter-wheat crop was marketed early, visibles during August-October nearly equalled those of 1924-25, when the crop was considerably larger; but with restricted marketings subsequently, the level became notably lower in contrast with 1924-25 and indeed approached that of 1925-26. In February and March the decline was less abrupt than in the preceding years, and visibles approached those of 1924-25 partly because of more rapid marketing, but also because domestic demand

¹ See also Appendix Tables IV and V.

² See Chart 4 in *WHEAT STUDIES*, May 1926, II, 216.

was apparently curtailed and exports declined.

In Canada, despite a rate of marketing by farmers about as rapid as last year's, and in the face of a crop smaller by some 20-25 million bushels, visible supplies in most of 1926-27 have run above those of 1925-26. Since late October there has been an unusually heavy accumulation of commercial stocks in Canada, as a result of early marketing made desirable by the heavy proportion of damp grain, and curtailment of the export movement on account of shortage of tonnage in the autumn, early closing of navigation, and probably restricted selling by the Pool.

The position of various elements of the Canadian visible as of the end of March in recent years is shown in Table 8. The

TABLE 8.—CANADIAN GRAIN IN STORE LATE IN MARCH, 1922-27*

(Million bushels)

| Last week in March | Total | Country elevators West. Div. | Interior elevators | Vancouver elevators | Fort William Port Arthur | U.S. Lake and Atlantic ports | Public elevators in the East |
|--------------------|--------------------|------------------------------|--------------------|---------------------|--------------------------|------------------------------|------------------------------|
| 1922... | 62.2 ^a | 20.6 | 3.2 | ... | 32.3 | 3.9 | 2.2 |
| 1923... | 80.3 ^a | 27.8 | 2.2 | ... | 32.0 | 10.8 | 7.5 |
| 1924... | 123.5 ^a | 49.0 | 5.1 | 1.4 | 52.3 | 11.9 | 3.8 |
| 1925... | 77.5 ^a | 18.2 | 3.5 | 3.8 | 31.8 | 9.0 | 11.2 |
| 1926... | 106.5 | 25.0 | 9.4 | 5.2 | 47.8 | 8.4 | 10.7 |
| 1927... | 113.0 | 30.2 | 10.6 | 6.9 ^c | 49.2 | 7.6 | 8.5 |

* Compiled from *Canadian Grain Statistics* and adjusted to bring stocks in all elevators into the proper week.

^a Figures prior to 1926 are less comprehensive than for later years.

^b None reported.

^c Including grain at Prince Rupert.

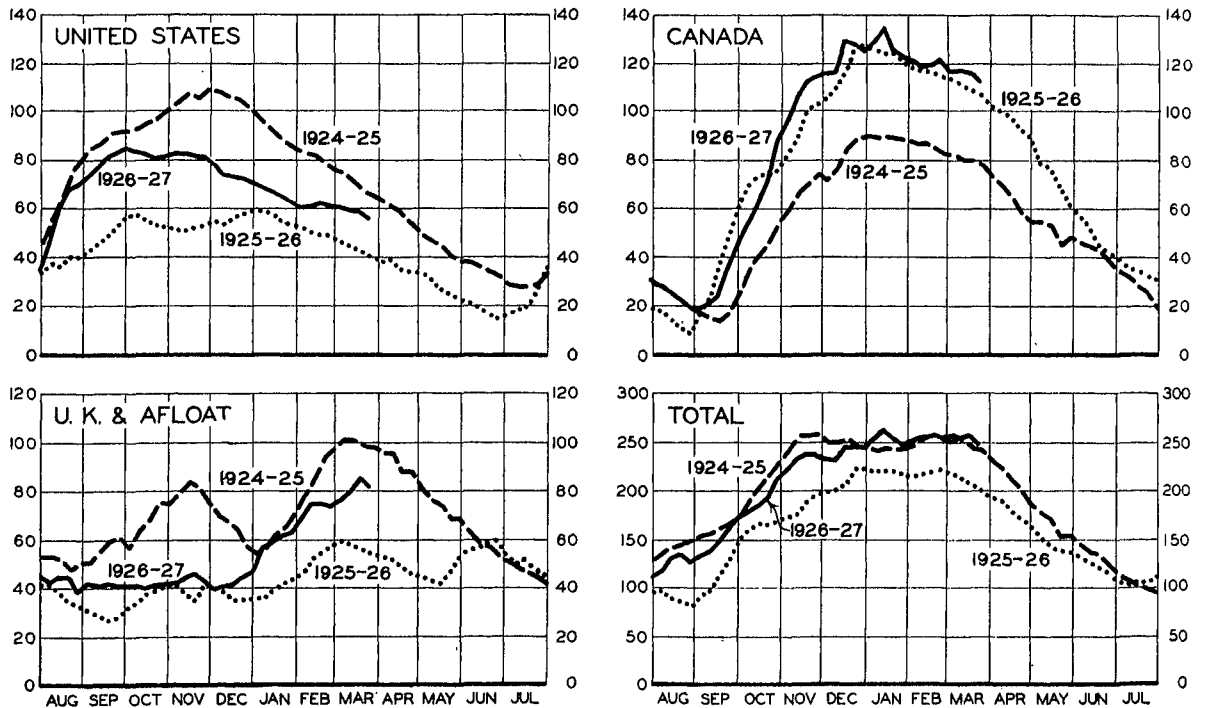
total has been higher only in 1924, following the 474 million bushel crop of 1923. It is significant that stocks at points in the United States and in public elevators in the East were not large by comparison with last year, while stocks at interior points and Vancouver were considerably larger, at Fort William and Port Arthur somewhat larger. This circumstance reflects the high proportion of damp grain in the 1926 crop, which severely taxed the drying facilities at the lake terminals and curtailed receipts there, so that movement from the interior elevators to terminals was somewhat restricted.

Official estimates covering such supplies on farms, in transit, and in flour mills as of March 31¹ confirm the impression that in Canada the accumulation of supplies has been unusually heavy. Total stocks at 176 million bushels were 15 million above those reported on March 31, 1925, and were larger than in any post-war year except 1924. Farm stocks at 51.4 million bushels were

the Southern Hemisphere increased in volume. Since December these visibles have been well above those of 1925-26, as was to be expected in view of heavier importers' requirements; but well below those of 1924-25. In that year stocks in United Kingdom ports were much higher,² and November-December shipments from the Southern Hemisphere, which swell the afloat figures,

CHART 4.—VISIBLE WHEAT SUPPLIES IN THE UNITED STATES, CANADA, UNITED KINGDOM PORTS, AND AFLOAT TO EUROPE, WEEKLY FROM AUGUST 1924*

(Million bushels)



* Data from *Price Current-Grain Reporter* and *Canadian Grain Statistics*.

little above last year's figure of 50.9 million, and stocks in flour mills were of the same size; but supplies in elevators (including stocks in storage in ships) were nearly 8 million bushels larger. Nearly twice as much grain was reported in transit by rail.

Stocks of wheat afloat (Chart 4) for Europe and in ports of the United Kingdom, which ran low in September-November on account of the situation in ocean freights, increased rapidly after mid-December as freight rates declined and shipments from

were considerably larger than was the case this year. The unusually low stocks in United Kingdom ports are notable as evidence of the ready absorption of wheat by millers; but it must be recalled that arrivals were small in view of requirements up to mid-March. Trade comments suggest that stocks of imported wheat remained low in practically all important European importing countries at least until March. Thereafter port stocks began to increase as arrivals became heavier than millers were willing to absorb in view of poor demand for flour and good crop and price prospects.

¹ See Appendix Table VI.

² See Table 7, p. 279, and Appendix Table IV.

IV. WHEAT PRICE MOVEMENTS

THE LEVEL OF WHEAT PRICES

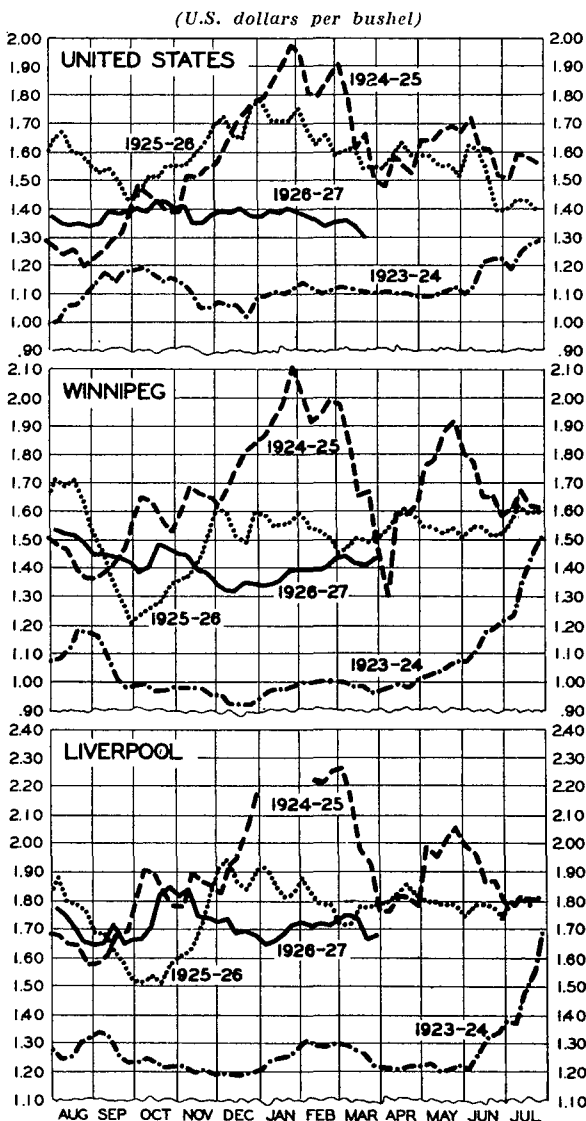
The general level of world wheat prices during the first two-thirds of the crop year has been much higher than in 1923-24, much lower than in 1924-25, and somewhat lower than in 1925-26. This is shown broadly in Chart 5. The contrast is due largely to the differing margins of export surpluses over import requirements in the different years, as governed by the distribution of world crops. The margin was widest in 1923-24, narrowest in 1924-25; it has been narrower this year than in 1923-24, but wider than in 1925-26.

This description of the general level of world prices is slightly misleading, since the price series presented in Chart 5 are not altogether comparable. The United States series, in which most of the important classes and grades are taken into account (Pacific wheat being the significant omission), is the most satisfactory index of general movements in the United States. But in 1925-26, owing to a short crop and the tariff, the United States was on a domestic basis, and relative prices ruled exceptionally high. The Liverpool and Winnipeg series cover only a single grade from the crop of a single country. No. 1 Northern Manitoba is usually a premium wheat; and it has sold at an unusual premium this year (size of crop considered) because of the comparative scarcity of Canadian wheat grading No. 1. If price series comparable in comprehensiveness and weighting to the United States series were available for Winnipeg and Liverpool, comparisons would probably yield slightly different results. The level of 1926-27 prices in those markets would probably approach the levels of the two preceding years less closely, and fall somewhat nearer to the level of 1923-24.

The comparative stability of prices in all three markets, and in other countries as well, has been noteworthy in the period December-March. In the United States the weekly weighted average cash price has fluctuated within the narrow range of \$1.30-\$1.40. In Winnipeg and Liverpool the range of No. 1 Northern was slightly wider, from \$1.31-\$1.44 and from \$1.65-\$1.76, respec-

tively. Fluctuations in prices were not much larger than in 1923-24, when the in-

CHART 5.—WEEKLY AVERAGE CASH PRICES OF ALL CLASSES AND GRADES OF WHEAT IN FIVE PRINCIPAL AMERICAN MARKETS, AND OF NO. 1 MANITOBA NORTHERN IN WINNIPEG AND LIVERPOOL, FROM AUGUST 1923*



* Data from *Crops and Markets*, direct from the U.S. Department of Agriculture, and from the *Grain Trade News* and the *Corn Trade News*. The American prices are weekly weighted averages for six markets since the first week in January 1927. There were no quotations for parcels afloat at Liverpool during January and the first two weeks of February 1925.

ternational position was unusually easy. The stability of prices, though disturbed at

Liverpool during parts of October and November by the sharp advance of ocean freight rates, was notable in all markets in August–November. This year, in contrast with the two preceding, there have been no sudden and extensive changes in crop prospects, and observed changes have been compensatory in nature. Speculative purchases of all sorts have been small; dealings in wheat futures in the United States markets were almost reduced to the low level of 1923–24;¹ European merchants, at least until March, are reported to have purchased only to satisfy forward sales; and shipping on consignment has been of small volume. In Europe millers generally have bought from hand to mouth, interesting themselves only in wheat in nearby positions because declining prices were anticipated as freight rates fell and because available world supplies at all times appeared ample; and in Canada and Australia supplies have rested largely in the strong hands of wheat pools. There has been no panicky buying on the part of importers, no pressure of offers on the part of exporters.

THE COURSE OF PRICES

The outstanding feature of the course of prices during December–March was their firmness in the face of the heaviest shipments in recent years and an international position continuously easy. Secondary features of considerable interest were the relatively sharp decline in the United States during March, and divergent movements in different markets during the period as a whole. Short-time movements in all markets have been of moderate intensity, and in such a period general conclusions must be cautiously drawn from price series applicable to particular grades and classes of wheat or to particular markets.

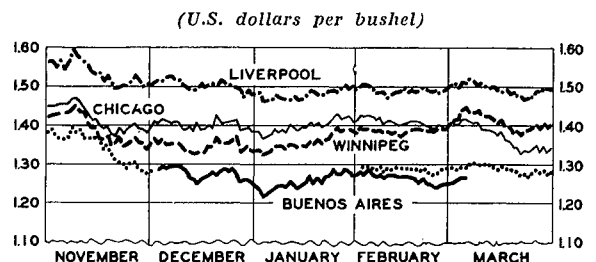
In our December survey we expressed our expectation of a decline in world prices

¹The average daily volume of trading in wheat futures in all United States markets from December to March 1923–24 to 1926–27 has been as follows in million bushels:

| | December | January | February | March |
|--------------|----------|---------|----------|-------|
| 1923–24..... | 21.1 | 14.3 | 18.1 | 22.8 |
| 1924–25..... | 58.8 | 73.4 | 81.0 | 87.4 |
| 1925–26..... | 90.3 | 60.6 | 58.3 | 69.0 |
| 1926–27..... | 37.4 | 28.2 | 26.4 | 34.1 |

from the level prevailing in late November—a decline in which United States prices of representative wheats might not share. We anticipated, in the light of the easy international position and declining freight rates, a decline sufficiently marked to be observable in readily available price series, such as the prices of May futures in Liverpool and Winnipeg and successive futures in Buenos Aires, and sufficiently effective to be registered in cash price quotations such as those summarized in Chart 5 and Appendix Table XI. As appears from Chart 6,

CHART 6.—DAILY CLOSING PRICES OF MAY WHEAT FUTURES IN LIVERPOOL, CHICAGO, AND WINNIPEG, AND OF FEBRUARY, MARCH, AND MAY FUTURES IN BUENOS AIRES, NOVEMBER–MARCH 1926–27*



* Compiled from the *Chicago Journal of Commerce* and the *Daily Trade Bulletin*, Chicago.

which shows the course of May futures prices in the world's principal markets, no marked decline occurred. It is true that May futures in Liverpool sold during January–March at a lower average level than during late November and December, but not at a materially lower level. Such appears to have been the case in Buenos Aires, though the necessity of considering quotations for successive futures serves to vitiate comparisons. But in Winnipeg the January–March level was appreciably higher than that prevailing late in November. It is probable that a series for Liverpool showing daily weighted average cash prices in that market would show that in general wheat has been obtainable by English millers at January–March prices appreciably lower than those of November–December. The same was probably true on the Continent, presumably to a greater degree. Nevertheless, it is substantially certain that price declines generally anticipated by European importers

in December proved not so extensive as was expected.

The factors proximately responsible for the firmness appear to have been, on the one hand, low stocks in Europe; and on the other, the position of wheat in strong hands in exporting countries. The situation in ocean freights had caused importers to buy from hand to mouth during most of September–December, and stocks remained uncomfortably low for the fulfilment of milling programs, especially in view of requirements. Consequently millers during January–March, though persisting in their policy of hand-to-mouth buying in view of an expected price decline, were forced to purchase regularly supplies large in the aggregate. Their combined demands proved sufficiently heavy to absorb current arrivals (which continued moderate in these weeks) and to limit accumulation of stocks at ports. This unwillingly active demand strengthened the hands of exporters—the pools in Canada and Australia, the large firms in Argentina; and in the United States only a comparatively small exportable surplus remained. The ready absorption of arrivals was commonly interpreted by the trade as evidence that European requirements for the crop year as a whole were proving “unexpectedly” heavy, and hence that prices might be expected to advance sharply. In our judgment, however, the underlying statistical position indicated in December that European requirements would be about as large as they are at present regarded by the trade. We reason that the ready absorption of December–March arrivals was to be anticipated at prices as low as or lower than those of late November, and that the firmness of prices was more largely due to the selling tactics of exporters than to the appearance of “unexpectedly” heavy import requirements.

A fairly sharp decline in futures prices in all markets was recorded from March 5 to March 22. We regard it in part as a deferred decline, which, except for the low European stocks and strong holding by exporters, might well have occurred in January as shipments increased in volume. In part, however, it was the effect of continuously good new crop prospects in the United

States and Europe. The decline was more marked in the United States and Winnipeg than in Liverpool and Buenos Aires, because Winnipeg and Chicago prices had for special reasons been previously high in contrast with Liverpool prices.

The Chicago May future in December and most of January, and the cash prices of representative wheats shown in Chart 8 (p. 285) were firm in contrast with prices in other markets. The spread between the Liverpool and Chicago May futures narrowed steadily until nearly the end of January. The evidence suggests that during these weeks United States prices approached a domestic basis, though without reaching it definitively. In February and March, however, this tendency was reversed. The spread between Chicago and Liverpool May futures widened, the Chicago future reluctantly following the course of representative cash wheat prices downward. During these months United States prices appear to have tended toward a definitive export basis.

The May future in Winnipeg followed a more decided trend, moving upward without considerable breaks from January 4 to March 5. The spread between the Winnipeg and the Liverpool price narrowed consistently. This was due chiefly to the relative and increasing strength of foreign demand for Canadian wheat of high grade necessary to European millers for blending with more freely available softer wheats. This year wheat grading No. 1 and No. 2 Northern Manitoba has been scarce, following a wet harvest which increased the proportion of tough grades. A Winnipeg cash price series, in which low and tough grades were given weights corresponding to their proportionate representation in the crop, might not show the same contrast as is shown between Winnipeg and Liverpool futures. Restrained offers by the Pool appear to have contributed to the strength of Winnipeg futures. The Winnipeg May price was considerably lower than the Chicago May during December and January. The narrowing of the spread until the May price in Winnipeg rose above the Chicago in early March was apparently due largely to the increasing strength of foreign demand for Canadian

wheat; but it further appears to lend some support to the inference that United States prices approached a domestic basis in December-January and receded from it in February-March.

Throughout January and February an astonishing variety of bullish arguments were advanced in North American trade journals. There were rumors of governmental intervention to withhold Argentine wheat from shipment, the dock-yard strikes were stressed, the possibility of damp Argentine wheat spoiling as it passed the equator was mentioned. Much was expected from the relaxation of governmental restrictions on futures trading in the United States on March 4, and the McNary-Haugen Plan was regarded as a price-raising influence before its defeat. Rains, fires, the charter party dispute, and holding by pools in Australia were emphasized. The Canadian crop was held to be overestimated and the Pool's selling tactics received comment. The civil wars in China were thought to constitute a bullish influence. Poor prospects for the Indian crop were regarded as causing a large reduction in the world margin of exportable surpluses over importers' requirements.¹ Comment upon the "exceptional" strength of European demand was continuous. Some of these factors deserved more emphasis than others. In North American markets the very number and variety of bullish arguments apparently contributed to the firmness of prices. They were most readily registered in the most sensitive market, that for wheat futures in Chicago, but on account of the manner in which daily movements in any one of the world's great futures markets are reflected in the others, there is reason to believe that the prevailing bullish sentiment in North America was not without effect on the movement of prices throughout the world. These psychological influences doubtless

¹ The *Price Current-Grain Reporter* of March 9, 1927, quoting a private estimate of 265 million bushels for the coming Indian crop, observed that so small a crop might reduce the margin of exportable surpluses over importers' requirements for the current crop year by 50 million bushels. Such an inference is wholly unwarranted by the facts of India's consumption and trade.

² See chart in *WHEAT STUDIES*, December 1926, III, 112.

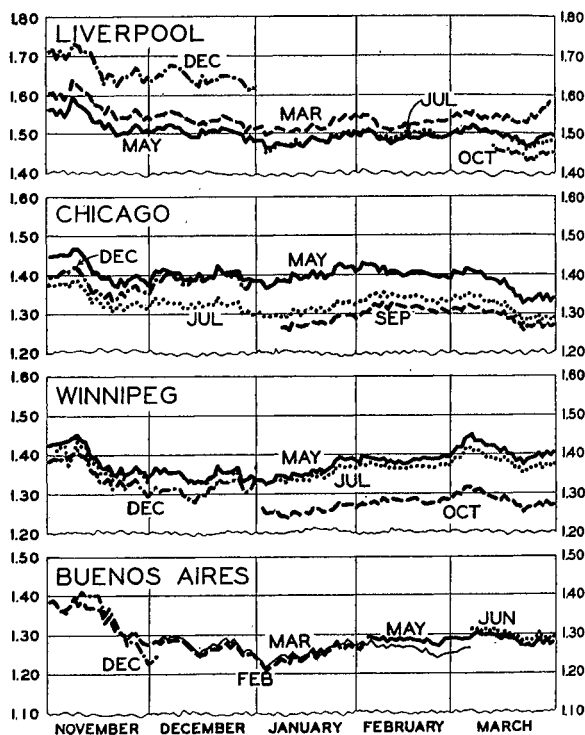
helped to defer the weakening of prices which the underlying facts seem to have warranted.

RELATIONS OF NEAR AND DISTANT FUTURES

Futures prices as quoted in the world's principal markets during November-March are given in greater detail in Chart 7. New-

CHART 7.—DAILY CLOSING PRICES OF PRINCIPAL WHEAT FUTURES IN FOUR LEADING MARKETS, NOVEMBER-MARCH 1926-27*

(U.S. dollars per bushel)



* Data from *Chicago Journal of Commerce and Daily Trade Bulletin*, Chicago.

crop futures (September in Chicago, October in Liverpool and Winnipeg) run only moderately below old-crop futures, reflecting trade impressions that the level of 1927-28 prices may not differ greatly from the level prevailing in the present crop year. Last year during the same period a much greater disparity of the prices of near and distant futures persisted in all three markets, from December to March,² since the current position was much tighter than it has been this year and favorable crop prospects (not, however, so good as this year)

augured a more considerable decline from levels then existing.

Several minor relationships are of interest. The December future in Liverpool closed well above the March, reflecting the shortage of wheat in near positions caused by restricted purchases during the period of high ocean freight rates. The March future closed a few cents farther above the May than it had run in preceding months, since ready absorption of arrivals had maintained spot cash prices above the future. In Chicago the May option ruled farther above the July during December-January than during February-March, a further indication that United States prices approached a domestic basis during the two former months. The differential between May and October options in Winnipeg has been around 10 cents, with a tendency to increase. This relationship probably reflects the prospect that Canadian wheat of high grades will be at a smaller premium next year than this.

UNITED STATES CASH PRICES

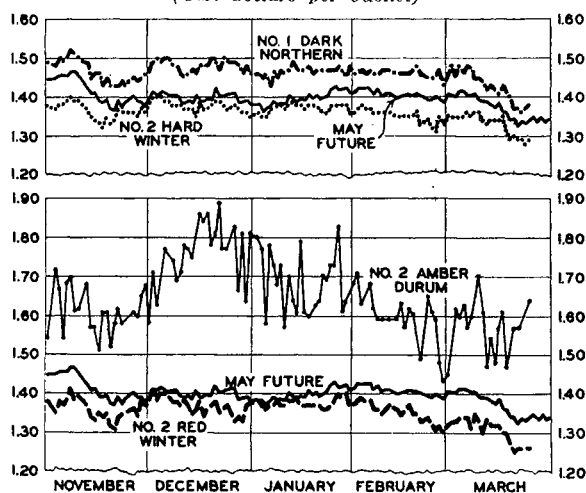
Cash prices of representative United States wheats, as shown in Chart 8, have fluctuated within fairly narrow limits, No. 2 Amber Durum at Minneapolis excepted. Throughout the crop year good qualities of durum have been at a high premium, whether for export or domestic use, because of scarcity. The wide day-to-day fluctuations have resulted from the small volume of sales at Minneapolis combined with considerable ranges in quality within the grade. No. 1 Dark Northern has, as usual, ruled at a premium because of its superior intrinsic value for milling; but the premium has not been exceptional this year despite the short crop, hard red winter being more generally substitutable than in most years.

Prices of No. 2 Red Winter and No. 2 Hard Winter have run rather closely together. In January and early February, however, No. 2 Red sold at slightly higher prices than No. 2 Hard, while in late February and March this relationship was reversed. In recent weeks red winter wheat has apparently been the variety most freely available for export.

EUROPEAN PRICES

Prices of domestic wheat in Europe¹ have fluctuated in part in accord with international movements, in part as governed by local conditions, but generally within fairly narrow limits. In most western European countries the highest level of the crop year was reached in November, when native wheats were in especially strong demand on

CHART 8.—DAILY CASH PRICES OF REPRESENTATIVE WHEATS IN UNITED STATES MARKETS, AND CLOSING PRICES OF THE MAY FUTURE IN CHICAGO, NOVEMBER-MARCH, 1926-27*
(U.S. dollars per bushel)



* No. 2 Hard Winter at Kansas City, No. 2 Red Winter at St. Louis, No. 1 Dark Northern Spring and No. 2 Amber Durum at Minneapolis. Data from the *Chicago Journal of Commerce, Crops and Markets*, and direct from the U.S. Department of Agriculture.

account of the high cost of ocean transportation. In England and Germany, where domestic markets most closely approximated the international movement, prices fell in December, rose in January, fell in February, and rose in early March, until the international price recession inaugurated a further decline. In Germany the high price of the period at 275 marks per ton in early December was only 13 marks per ton—some 9 cents per bushel—above the low in late February.² In France, prices were influenced chiefly by the rate of domestic marketing and the world movement,

¹ See Appendix Table XII.

² As shown by daily high cash prices in Berlin, quoted in *Industrie und Handelzeitung*.

when the special influences of fluctuations in exchange rates had been eliminated, and after January 1 the full duty of 18.4 francs per quintal again became payable.¹ The highest prices of the period, 186.5 francs per quintal, were reached at the end of December, as farmers held their wheat in anticipation of higher prices when the full duty became payable. The lowest prices, 167 francs and 163 francs, were reached

early in December and late in March.² With minor interruptions prices declined irregularly after the first of the year, liberal marketings being chiefly responsible. In Hungary prices have risen slowly since early January.³ In France, Germany, and Italy domestic prices in terms of gold have ruled substantially above those of last year, as a result of smaller crops and tariff protection.

V. PROSPECTS FOR 1927 CROPS

During March new-crop prospects begin to exert a substantial influence on world prices and movements of wheat. Prospects for world wheat supplies in the coming crop year 1927-28 are of course uncertain so early in the season. Nothing definite is known of next winter's crop in the Southern Hemisphere, where seeding has not yet begun. The outlook for North American spring-wheat production rests thus far chiefly upon the present state of subsoil moisture and reported delay in seeding of United States crops; and subsequent developments may substantially alter current prospects. Prospects for United States, European, Indian, and North African winter-wheat production are somewhat more definite, though harvest is still from one to four months distant except in India.

Present indications point to somewhat larger crops in the importing countries of Europe this year than last. United States winter-wheat crops promise to be of good size, and the total, if the spring-wheat crop is good, may equal even last year's large yield. In India and North Africa, however, crops do not promise to be large. Exclusive of Russia, the Northern Hemisphere crop of 1927 now seems likely to be as large as that of 1926 or perhaps larger.

INDIA AND NORTH AFRICA

Prospects for 1927 wheat crops have been poorer in India and North Africa than else-

where in the Northern Hemisphere. The monsoon provided a normal supply of moisture in India, and the second official estimate of acreage planted showed an increase of more than half a million acres over the final estimate of acreage in 1926. During January and February, however, the winter rainfall was deficient, and trade reports were current that production would fall far below the moderate yield of 325 million bushels in 1926. But a satisfactory summer monsoon in India, with a normal planted acreage, practically never results in a really poor crop, despite deficient winter rainfall. Yield has fallen below 10 bushels per acre but four times in the past twenty-nine years and not once below nine bushels per acre in this period. A mediocre crop not far different from last year's is more probable than a distinctly poor crop in view of the reported acreage, the satisfactory summer monsoon, and more satisfactory rainfall late in February.

In North Africa (Egypt excluded) an unusually dry fall followed by an unusually wet winter hindered seeding operations to such an extent that acreage was estimated during March as about a million acres below that of 1926 and over half a million below that of 1925. Despite the satisfactory appearance of the growing crop, production will probably not exceed that of last year, when the crop was of average size.

EUROPE, INCLUDING RUSSIA

On the basis of current incomplete information, larger acreages appear to have been planted to winter wheat this year than last in most European countries. Slight reductions have been observed either officially or

¹ A drawback of 8 francs per quintal was permitted after October 18, 1926, on proof that imported wheat had actually passed into domestic consumption.

² As shown by daily high cash prices on the *marché libre* at Paris, quoted in the *Bulletin des Halles*.

³ As shown by cash prices in Budapest, quoted in *Magyarorszag*.

unofficially in the United Kingdom, Roumania, Bulgaria, and Latvia. Information is deficient for Hungary, Spain and Portugal, Belgium and Holland, and the Scandinavian countries; but there appears to be no reason to anticipate noteworthy changes in either direction. In 11 European countries 45.1 million acres have been sown to winter wheat as against 44.8 harvested in 1926 and 45.3 in 1925. Including the Ukraine, however, the increase is more marked—54.6 million acres in 1927 as against 52.4 in 1926 and 51.4 in 1925.

The extent of abandonment cannot be ascertained. In most countries, however, growing conditions have been favorable. Excessive moisture has hindered growth on heavy soils in England. In western Europe as a whole the winter has been exceptionally mild and damp, though moisture has not been excessive. Fears of possible frost damage on account of a lack of snow cover proved unfounded in Germany, Austria, Hungary, and Jugo-Slavia. The snow cover was adequate farther east, in Roumania, Bulgaria, and the Ukraine. In France and Italy some complaints were made of the prevalence of pests; but brief spells of cold weather at least in France removed even this minor complaint. In Italy there were some complaints of drought in March. Throughout February and March the French press remarked that more satisfactory prospects had seldom been known.

Throughout Europe the moisture supply is satisfactory, growth is well advanced for the season, acreage is higher than in the two preceding years, and abandonment on account of winter-killing will probably be slight because of the mild winter. If favorable weather continues, a harvest equal to that of 1925, some 1,400 million bushels, appears quite possible; but subsequently unfavorable weather may alter present prospects substantially. At present one can merely say that there are more reasons to expect good yields than to anticipate mediocre or poor.

UNITED STATES WINTER WHEAT

The outlook for the winter-wheat crop in the United States at this season has seldom been better. Preliminary reports of

acreage planted indicate an area well above that harvested in the three preceding years. A mild winter gives reason to expect small abandonment, and growth is well advanced, though not dangerously so. The moisture supply is excellent in most areas. With only average growing conditions until harvest, a good crop of winter wheat is in prospect. As is probable on general principles in view of the poor yield in 1926, and a satisfactory supply of sub-soil moisture, the spring-wheat crop will exceed last year's. Hence present indications are that the total crop will surpass that of 1925 and perhaps equal that of 1926. Present expectations, however, are subject to large alterations.

Sowings of winter wheat were officially reported on December 21 at 41.8 million acres as compared with 39.8 million harvested in the fall of 1925, an increase of 5 per cent. Nearly 1.5 million acres of the increase occurred in the heart of the hard winter-wheat belt, in the states of Nebraska, Kansas, Oklahoma, and Texas. Other notable increases, totaling about half a million acres, were reported for Missouri and Washington. In the soft winter-wheat belt north of the Ohio and east of the Mississippi, however, decreases were necessary on account of unfavorably wet weather in the autumn. The total reported increase falls below the increase intended by farmers last August,¹ but is nevertheless of considerable significance.

The official report of condition as of December 1 was fairly low, 81.8 per cent as against 82.6 last year and 84.4 for the ten-year average. Conditions were poorest in the soft winter-wheat belt, where much seeding was conducted on water-logged soil, and best in the Pacific region, where early and heavy autumn rains were beneficial. In subsequent weeks precipitation and temperature were favorable in practically all regions: adequate snow cover existed when temperature was dangerously low, and mild weather prevailed in the absence of cover. Throughout December and January, however, sowings in an area centering in western Kansas suffered from

¹ As of August 1, 1926, farmers expressed intentions to plant 45 million acres. *Crop and Markets Monthly Supplement*, August 1926, III, 235.

drought and soil drifting. Abundant rain and snow beginning in early February (prevailing also in other areas) allayed fears for a time, but in early April abandonment in this region was reported to be heavy. On March 19 the *Modern Miller* described prospects (east of the Rocky Mountains) as "the best . . . on record," with reports from the important producing states of Kansas, Oklahoma, and Texas as "the best ever received." On March 15 the *Commercial Review* stated that in the Pacific Northwest "conditions could not be better."

Private estimates of condition in per cent of normal, abandonment in per cent, and production in million bushels were made as follows, as of the end of March:

| | Condition | Abandonment | Production |
|--------------------|-----------|-------------|------------|
| Bryant | 86.9 | ... | 584 |
| Cromwell | 85.2 | ... | 576 |
| Murray | 87.1 | 6.4 | 585 |
| Snow | 85.8 | ... | 584 |

Estimators who did not calculate abandonment figures concurred in expecting a figure near or below the official estimate of last year, 7.3 per cent, while the ten-year average is 13.4 per cent.

The official report of winter-wheat condition, issued April 8, was slightly less optimistic than private reports current during March, but by no means unfavorable. For the United States as a whole, condition averaged 84.5 per cent, as compared with 84.1 for 1926 and 68.7 in 1925, and the ten-year average of 79.8. Condition was above average in each of the major producing regions, but farthest above in the hard winter-wheat region. As compared with last year, however, conditions were better in the soft winter-wheat area, and not so good in the Southwest. Heavy general rains in April appear not to have caused serious damage.

The final outcome, however, is by no means determined by spring prospects. Last year's good crop was to a considerable extent due to exceptionally favorable weather immediately prior to and during harvest. A calculation has been made recently showing that a warm March (as this year's) is usually followed by a poor crop of winter wheat.¹ The reasons for this phenomenon are not clear, and special circumstances this year may or may not

cause it to be an exception; but the computation reinforces the need for caution in attaching weight to crop prospects several months before harvest.

NORTH AMERICAN SPRING WHEAT

Sowings of spring wheat in the United States and Canada have scarcely begun. Heavy autumnal rains and heavy snowfall during the winter provided an unusually good supply of subsoil moisture over most of the North American spring-wheat belt, an area in South Dakota being the chief exception. Moisture supplies are considerably larger, but heavy spring rains have delayed seeding.

It is impossible to anticipate the probable size of the Canadian crop so early in the season: the most that can be said is that prospects are normally favorable. The amount of plowing done in the fall was relatively small on account of unfavorable weather and delay in threshing; but fall plowing is at best comparatively unimportant. Much of the wheat on farms in the spring is unquestionably damp, and perhaps not satisfactory for seed; but Canadian farmers ordinarily purchase much of their seed. Seeding began in some localities around April 1, but heavy soil and late snow delayed operations subsequently.

In the United States, farmers on March 1 expressed intentions to plant 19.9 million acres to spring wheat as against 19.6 million last year—an increase of 1.6 per cent. In the four important states of Minnesota, Montana, and North and South Dakota, however, farmers intended to increase acreage in durum wheat by 671 thousand acres, but to decrease acreage in hard spring wheat slightly. High prices of durum during the past year have presumably influenced intentions. In Washington, where conditions were exceptionally favorable for the sowing of winter wheat, a decrease of 378 thousand acres was intended in spring planting. Intentions to plant may of course be frustrated by the recent excessive rainfall. But at present a crop larger than last year's appears probable in view of the favorable supply of moisture.

¹Nat C. Murray, in Clement, Curtis & Company's monthly circular, April 1, 1927.

VI. OUTLOOK FOR TRADE, PRICES, AND CARRYOVERS

The course of international trade and prices during April–July, and the position and volume of stocks at the end of the crop year, cannot be foreseen clearly because of their interrelation with the prospects for new crops and the outcome of the first harvests. Nevertheless certain probabilities and possibilities may be mentioned.

INTERNATIONAL TRADE

The volume of international trade in the ensuing four months promises to exceed that of August–November but to fall below the exceptionally heavy movement of December–March. Average weekly shipments will probably run in the neighborhood of 14 million bushels, rather more than less. The present level of prices appears sufficiently low to facilitate continued heavy European imports; a change for the worse in European crop prospects would probably stimulate purchases, even at rising prices, in view of the still moderate stocks of import wheat; a moderate decline in prices, if crop prospects continue equally favorable, would probably not affect purchases greatly. A peak of shipments is to be expected in late April or early May after the opening of navigation in Canada. This peak is likely to come somewhat earlier this year than last, but to be less pronounced, because navigation is opening early instead of late and because winter shipments have continued high and good shipments from the Southern Hemisphere may be expected to continue.

On account of Canada's large exportable surplus, high freight rates on long-voyage routes, and the need of Europe for hard wheats, Canada promises to furnish a large proportion of the world's exports during April–July. Both Argentine and Australian shipments promise to be larger than usual in absolute amounts, though not in proportion to the available surpluses. In May and June corn will compete with wheat for shipment from Argentina. United States exports will in our judgment prove comparatively small, unless the crop has been underestimated. As was the case last year, United States exports may be larger than

usual in July if the winter-wheat crop fulfils its promise and is harvested early. Little wheat will be exported from the Danube basin, India, or North Africa. Russian exports will probably increase somewhat as roads improve in the spring, but no great outpouring of the apparently abundant stocks is to be anticipated while the machinery of exportation remains in its present condition.

The policy of European purchasers will probably remain much the same, with liberal buying of wheat in near positions but no notable tendency to enter long commitments. For at least two months arrivals in Europe will be heavy, and thus far crop prospects are favorable both as to quantity and as to an early harvest. These aspects of the situation augur lower prices and restraint of purchasing; but the present level of prices is low in comparison with the past two years, and the small spread between old- and new-crop futures—much smaller than prevailed last year—provides slight incentive for restraint. A blind rush of importers to purchase is certainly not likely while arrivals are heavy and exporters' stocks large, unless crop prospects take a decided turn for the worse; nor is a sharp reduction of purchases likely while import stocks continue fairly low.

THE PRICE OUTLOOK

With average weather conditions during the next four months, the outlook is for a continuance of moderate fluctuations in either direction of world prices as registered at Liverpool. The fundamental statistical position is presumably largely discounted. Changes in crop prospects bid fair to govern the general course, merchandising the shorter fluctuations. A sudden reversal in prospects would enhance prices to a degree not predictable. Continuation of favorable prospects for winter-wheat crops or their gradual improvement will tend to lower world prices somewhat, but not greatly before the end of July.

If the large available supplies of Argentina, Australia, and Canada should be freely offered within a period of a few weeks, a

considerable decline might ensue. But such a substantial pressure of offers seems unlikely while the pools continue to control large supplies in Canada and Australia. Of the alternatives of depressing the market by cheap and heavy offers or of carrying unusually large stocks, the latter would probably be regarded as the more desirable under current prices and prospects. Panicky selling would certainly bring lower prices immediately, whereas unfavorable crop developments in North America or Europe might cause a rise more than repaying the cost of storage. With sellers in their present dilemma and buyers feeling themselves under slight pressure, prices bid fair to move within a narrow range, given average weather conditions. In the United States there is a possibility that winter-wheat prices will move definitively from an export basis to a domestic basis, but on the basis of available data this is no more than a possibility. Since our export surplus of representative wheat is largely exhausted and since winter-wheat prospects are subject to great variation during April-June, it will not be surprising if market prices show more considerable fluctuations in the United States than in other great markets.

OUTWARD CARRYOVERS

As we have suggested in earlier pages, present indications point to end-year (August 1) stocks unusually large in three great exporting countries and in Russia, and about average in the United States (July 1). Stocks of domestic wheats in Europe, already low for this season of the year, promise to be at a lower level than usual by the end of July. Stocks of import wheat are more difficult to adjudge, but will probably be of moderate dimensions (though larger than last year's) if, as appears likely, importers continue to purchase cautiously. Stocks afloat on August 1 may be expected to exceed last year's figures.

Any calculation of end-year stocks in the important exporting countries must rest upon assumptions regarding not only the accuracy of current crop estimates, the probable developments in international trade and prices, and the rate of domestic disappearance in its various categories, but

also upon obscure trends in these items evidenced by incomplete data for recent years. To a considerable extent these stocks must be estimated as residual figures after other more readily measurable items of disappearance have been deducted from available supplies. Appendix Table X presents reasoned estimates of the disposition of wheat supplies, including our item for carryovers, for each of the four major exporting countries for the current and two preceding crop years. These estimates are of course tentative for all countries, and are to be regarded not as absolute figures but as approximations to the middle of a probable range. The figures for the United States and Canada rest upon a sounder foundation of statistical information than those for Argentina and Australia. For Soviet Russia, the only other important exporter, numerical expression is not feasible; but official and trade reports agree that Russian stocks are even higher than last year, and there are strong grounds for anticipating substantial carryovers.

In Canada, with stocks at present unusually heavy, and with the Pool apparently likely to avoid exceptional efforts to sell, the carryover promises to be larger than last year and not far from the same size as in 1925, though the 1926 crop was smaller than either of the two preceding. August 1 stocks in Australia promise to exceed those of 1925 and 1926 by substantial amounts, in view not only of the much larger crop, but also of somewhat restricted shipments due partially to the pools. In Argentina the situation is less clear because of the large quantity of old-crop wheat, which may or may not be used for export. But exportation, though heavy, has not been and does not promise to be of sufficient volume to reduce to small proportions the large supplies of new-crop wheat; and it seems altogether probable that August 1 stocks will be unusually high.

The United States carryover may be calculated somewhat more directly. Stocks on farms on July 1 may be estimated at 4 per cent of the preceding crop.¹ Visible supplies are likely to be low if the July-September

¹ A detailed analysis of farm stocks will appear in a subsequent issue of *WHEAT STUDIES*.

carrying charge continues negative. Stocks in country mills and elevators will probably be slightly below normal size. Our tentative estimate is for 75 million bushels, a figure higher than last year's, but lower than in any other year since 1919. Except for the heavy concentration of exports in the first half of the crop year, the carryover

would promise to be higher. So low a figure is consistent with the present crop estimate and the volume of exports to the end of March, as well as with reasonably reliable estimates of domestic disappearance. If the official return proves appreciably higher, it will, in our opinion, reflect upon the accuracy of the crop estimate.

This survey has been written by M. K. Bennett, with substantial assistance from Joseph S. Davis, Alonzo E. Taylor, and Holbrook Working, and with the aid of Robert D. Calkins and the statistical staff of the Institute

APPENDIX

TABLE I.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING AREAS, 1919-26*

(Million bushels)

| Year | United States | Canada | India | Australia | Argentina | Chile | Uruguay | Hungary | Bulgaria | Jugoslavia | Roumania | Soviet Russia | Mexico |
|--------------|---------------|--------------------|-------|-----------|-----------|-------|---------|---------|----------|------------|--------------------|--------------------|-------------------|
| 1919..... | 968.0 | 193.3 | 280.3 | 46.0 | 217.0 | 19.9 | 5.9 | .... | 29.8 | 51.0 | 66.0 | .... | 14.2 ^a |
| 1920..... | 833.0 | 263.2 | 377.9 | 145.9 | 156.1 | 23.2 | 7.8 | 38.3 | 30.0 | 43.0 | 61.3 | .... | 15.0 |
| 1921..... | 814.9 | 300.9 | 250.4 | 129.1 | 191.0 | 23.6 | 9.9 | 52.7 | 29.2 | 51.8 | 78.6 | 171.7 ^b | 10.0 |
| 1922..... | 867.6 | 399.8 | 367.0 | 109.5 | 195.8 | 25.9 | 5.2 | 54.7 | 37.7 | 44.5 | 92.0 | 202.4 ^b | 13.6 |
| 1923..... | 797.4 | 474.2 | 372.4 | 125.0 | 247.0 | 28.1 | 13.3 | 67.7 | 36.2 | 61.1 | 102.1 | 326.9 ^b | 13.7 |
| 1924..... | 864.4 | 262.1 | 360.6 | 164.6 | 191.1 | 24.5 | 9.9 | 51.6 | 24.7 | 57.8 | 70.4 | 381.7 | 10.4 |
| 1925..... | 676.4 | 433.2 ^c | 331.0 | 113.4 | 191.1 | 27.5 | 10.0 | 71.7 | 49.6 | 78.6 | 104.7 | 713.0 | 9.4 |
| 1926..... | 832.3 | 409.8 | 324.9 | 164.4 | 222.8 | .... | .... | 69.2 | 41.1 | 71.4 | 110.9 | 809.6 | 10.2 |
| Average | | | | | | | | | | | | | |
| 1909-13..... | 690.1 | 197.1 | 351.8 | 90.5 | 147.1 | 20.1 | 6.5 | 71.5 | 37.8 | 62.0 | 158.7 ^d | 758.9 | 11.5 ^d |
| 1920-25..... | 809.0 | 355.6 | 343.2 | 131.2 | 195.4 | 25.5 | 9.4 | 56.1 | 34.6 | 56.1 | 84.9 | .... | 12.0 |

| Year | Morocco | Algeria | Tunisia | Egypt | United Kingdom | France | Germany | Italy | Belgium | Netherlands | Denmark | Norway | Sweden |
|--------------|---------|---------|---------|-------|-------------------|--------------------|---------|--------------------|---------|-------------|------------------|--------|--------|
| 1919..... | 16.4 | 21.0 | 7.0 | 30.1 | 69.3 | 187.1 ^e | 79.7 | 169.8 ^f | 10.6 | 5.9 | 5.9 ^f | 1.07 | 9.4 |
| 1920..... | 17.9 | 8.4 | 5.2 | 31.7 | 56.8 | 236.9 | 82.6 | 141.3 | 10.3 | 6.0 | 7.4 | 1.00 | 10.3 |
| 1921..... | 23.2 | 28.2 | 10.6 | 37.0 | 73.8 | 323.5 | 107.8 | 194.1 | 14.5 | 8.6 | 11.1 | .97 | 12.3 |
| 1922..... | 12.9 | 22.6 | 3.7 | 36.6 | 65.2 | 243.3 | 71.9 | 161.6 | 10.6 | 6.2 | 9.2 | .64 | 9.4 |
| 1923..... | 20.0 | 36.2 | 9.9 | 40.7 | 58.5 | 275.6 | 106.4 | 224.8 | 13.4 | 6.2 | 8.9 | .59 | 11.0 |
| 1924..... | 28.7 | 17.2 | 5.2 | 34.2 | 53.9 | 281.2 | 89.2 | 170.1 | 13.0 | 4.7 | 5.9 | .49 | 6.8 |
| 1925..... | 23.9 | 32.7 | 11.8 | 36.2 | 53.7 | 330.3 | 118.2 | 240.8 | 14.5 | 5.7 | 9.7 | .49 | 13.4 |
| 1926..... | 18.1 | 22.5 | 13.0 | 37.2 | 51.6 ^g | 248.6 | 95.4 | 220.6 | 12.2 | 4.8 | 8.8 | .60 | 12.4 |
| Average | | | | | | | | | | | | | |
| 1909-13..... | 17.0 | 35.2 | 6.2 | 33.7 | 59.6 | 325.6 | 131.3 | 184.4 | 15.2 | 5.0 | 6.3 | .31 | 8.1 |
| 1920-25..... | 21.1 | 24.2 | 7.7 | 36.1 | 60.3 | 281.8 | 96.0 | 188.8 | 12.7 | 6.2 | 8.7 | .70 | 10.5 |

| Year | Spain | Portugal | Switzerland | Austria | Czechoslovakia | Poland | Finland | Latvia | Estonia, Lithuania | Greece | Japan, Chosen | South Africa | New Zealand |
|--------------|-------|-------------------|-------------|---------|-------------------|-------------------|---------|--------|--------------------|-------------------|---------------|------------------|-------------|
| 1919..... | 129.2 | 8.2 | 3.9 | 5.1 | 15.4 ^h | 22.2 ⁱ | .26 | .... | 3.12 | 9.8 | 41.1 | 5.1 | 4.6 |
| 1920..... | 138.6 | 10.4 | 3.6 | 5.4 | 26.4 | 22.7 | .27 | .39 | 2.60 | 11.2 | 41.1 | 7.3 | 6.9 |
| 1921..... | 145.2 | 9.4 | 3.6 | 6.5 | 38.7 | 37.4 | .45 | .78 | 3.27 | 11.2 | 39.7 | 8.4 | 10.6 |
| 1922..... | 125.5 | 10.0 | 2.3 | 7.4 | 33.6 | 42.4 | .71 | .96 | 4.04 | 9.6 | 39.2 | 6.1 | 8.4 |
| 1923..... | 157.1 | 13.2 | 3.6 | 8.9 | 36.2 | 49.7 | .69 | 1.64 | 3.70 | 13.4 | 34.7 | 6.0 | 4.2 |
| 1924..... | 121.8 | 10.5 | 3.1 | 8.5 | 32.2 | 32.5 | .79 | 1.58 | 3.86 | 8.3 | 37.3 | 7.1 | 5.4 |
| 1925..... | 162.6 | 11.5 | 3.5 | 10.7 | 39.3 | 57.9 | .93 | 2.16 | 6.08 | 14.2 | 40.0 | 8.3 | 4.6 |
| 1926..... | 147.0 | 8.4 | 4.0 | 10.0 | 35.7 | 47.1 | .70 | 1.86 | 5.18 | 11.2 | 38.7 | 8.0 | .... |
| Average | | | | | | | | | | | | | |
| 1909-13..... | 130.4 | 11.8 ^j | 3.3 | 12.8 | 37.9 | 63.7 | .14 | 1.48 | 3.63 | 16.3 ^j | 32.0 | 6.0 ^j | 6.9 |
| 1920-25..... | 141.8 | 10.8 | 3.3 | 7.9 | 34.4 | 40.4 | .64 | 1.25 | 3.92 | 11.3 | 38.7 | 7.2 | 6.7 |

* Data of U.S. Department of Agriculture. For 1909-13, including U.S. Department of Agriculture estimates for area within post-war boundaries. Dots (....) indicate that data are not available.

^a Unofficial estimate.

^b Excluding Transcaucasia and Turkestan.

^c Revised to include official figure of 21.8 million bushels apparent underestimate.

^d Four-year average.

^e Includes only part of Alsace-Lorraine.

^f Old boundaries.

^g Excluding Ireland.

^h Bohemia and Moravia only.

ⁱ Former Russian Poland.

^j One year only.

TABLE II.—MONTHLY WHEAT RECEIPTS AT PRIMARY MARKETS IN THE UNITED STATES AND CANADA*
(Million bushels)

| Month | United States primary markets | | | | Fort William and Port Arthur | | | | Vancouver | | | |
|-----------------|-------------------------------|---------|---------|---------|------------------------------|---------|---------|---------|-----------|---------|----------------------|----------------------|
| | 1923-24 | 1924-25 | 1925-26 | 1926-27 | 1923-24 | 1924-25 | 1925-26 | 1926-27 | 1923-24 | 1924-25 | 1925-26 ^a | 1926-27 ^b |
| Aug. | 65.3 | 93.0 | 43.3 | 71.6 | 2.0 | 1.3 | 1.2 | 1.5 | .00 | .21 | .55 | .12 |
| Sept. | 45.3 | 82.1 | 57.9 | 48.7 | 28.3 | 7.1 | 45.7 | 32.8 | .22 | .41 | .28 | .29 |
| Oct. | 40.5 | 88.0 | 36.1 | 37.1 | 67.1 | 40.9 | 53.2 | 56.1 | 3.23 | 3.98 | 7.04 | 6.37 |
| Nov. | 37.2 | 60.5 | 34.1 | 29.8 | 72.5 | 42.7 | 51.5 | 60.5 | 3.04 | 5.05 | 9.79 | 7.22 |
| Aug.-Nov. | 188.3 | 323.6 | 171.4 | 187.2 | 169.9 | 92.0 | 151.6 | 150.9 | 6.49 | 9.65 | 17.66 | 14.00 |
| Dec. | 28.4 | 36.3 | 34.9 | 22.4 | 51.9 | 20.3 | 53.5 | 26.3 | 6.76 | 4.21 | 6.14 | 6.63 |
| Jan. | 15.9 | 24.7 | 21.6 | 24.6 | 12.7 | 4.1 | 10.5 | 14.0 | 7.27 | 3.84 | 10.03 | 6.83 |
| Feb. | 19.8 | 19.9 | 16.2 | 21.0 | 3.9 | 6.2 | 4.0 | 8.6 | 7.32 | 2.08 | 7.74 | 4.27 |
| Mar. | 18.0 | 17.3 | 15.1 | 16.6 | 2.5 | 8.5 | 3.2 | 6.3 | 8.09 | .74 | 6.98 | 5.94 |
| Dec.-Mar. | 82.1 | 98.2 | 87.8 | 84.6 | 71.0 | 39.1 | 71.2 | 55.2 | 29.44 | 10.87 | 30.89 | 23.67 |
| Apr. | 10.1 | 10.4 | 14.0 | .... | 6.4 | 8.1 | 1.8 | .... | 6.47 | 1.02 | 3.58 | .... |
| May. | 15.4 | 17.6 | 15.7 | .... | 15.8 | 7.0 | 17.2 | .... | 5.24 | 1.54 | 1.20 | .... |
| June. | 16.4 | 21.9 | 21.0 | .... | 21.2 | 4.1 | 13.6 | .... | 3.05 | .74 | .22 | .... |
| July. | 35.1 | 41.8 | 77.0 | .... | 13.1 | 6.7 | 6.4 | .... | 1.31 | .11 | .27 | .... |
| Apr.-July. | 77.0 | 91.7 | 127.7 | .... | 56.5 | 25.9 | 39.0 | .... | 16.07 | 3.41 | 5.27 | .... |
| Aug.-July. | 347.4 | 513.5 | 386.9 | .... | 297.4 | 157.0 | 261.8 | .... | 52.00 | 23.93 | 53.82 | .... |

* United States data are unofficial figures compiled from *Survey of Current Business*; Canadian data are official figures from *Reports on the Grain Trade of Canada and Canadian Grain Statistics*.

^a Totals for the four or five weeks ending in each month. ^b Receipts at Prince Rupert included after October 1.

TABLE III.—WEEKLY WHEAT RECEIPTS AT PRIMARY MARKETS IN THE UNITED STATES AND CANADA*
(Million bushels)

| Month | United States | | | | Fort William and Port Arthur | | | | Vancouver | | | |
|-----------|---------------|---------|---------|---------|------------------------------|---------|---------|---------|-----------|---------|---------|----------------------|
| | 1923-24 | 1924-25 | 1925-26 | 1926-27 | 1923-24 | 1924-25 | 1925-26 | 1926-27 | 1923-24 | 1924-25 | 1925-26 | 1926-27 ^a |
| Dec. | 7.18 | 14.18 | 9.74 | 5.44 | 16.11 | 9.50 | 14.64 | 10.55 | 1.37 | 1.08 | 1.94 | .95 |
| | 6.73 | 9.23 | 9.66 | 5.67 | 13.82 | 6.26 | 14.77 | 7.14 | 1.58 | 1.18 | 1.30 | 1.02 |
| | 8.02 | 6.74 | 8.64 | 4.91 | 12.24 | 2.88 | 14.56 | 4.99 | 1.53 | 1.18 | .74 | 1.52 |
| | 5.31 | 4.79 | 6.18 | 3.98 | 7.10 | 2.10 | 8.82 | 3.87 | 1.41 | .47 | 2.15 | 1.86 |
| Jan. | 3.19 | 4.08 | 3.45 | 4.21 | 5.34 | 1.39 | 4.98 | 4.66 | 1.63 | .74 | .60 | 1.76 |
| | 3.27 | 4.10 | 6.22 | 4.69 | 3.56 | 1.02 | 4.32 | 5.21 | 1.69 | 1.12 | 1.86 | 1.75 |
| | 3.49 | 5.29 | 5.23 | 4.76 | 2.44 | .71 | 2.73 | 3.71 | 1.47 | .87 | 1.99 | 1.76 |
| | 3.70 | 6.30 | 4.64 | 4.64 | 2.24 | .93 | 1.63 | 2.81 | 1.69 | .72 | 2.73 | 1.11 |
| | 4.13 | 6.32 | 4.39 | 5.26 | 2.05 | 1.09 | 1.31 | 1.98 | 1.75 | .96 | 2.78 | 1.76 |
| Feb. | 3.84 | 6.77 | 4.31 | 6.16 | 1.26 | .93 | 1.21 | 1.98 | 1.77 | .59 | 2.42 | 1.33 |
| | 5.89 | 5.08 | 4.06 | 4.96 | 1.06 | 1.64 | 1.09 | 2.27 | 1.83 | .57 | 1.93 | 1.35 |
| | 4.44 | 4.28 | 5.05 | 5.76 | .73 | 1.65 | .83 | 2.37 | 1.73 | .61 | 1.88 | .74 |
| | 5.12 | 3.78 | 3.37 | 4.33 | .52 | 1.95 | .84 | 1.97 | 1.73 | .58 | 1.51 | .88 |
| Mar. | 4.72 | 4.71 | 3.79 | 4.58 | .63 | 2.06 | .69 | 1.61 | 1.75 | .32 | 1.69 | 1.28 |
| | 4.67 | 4.52 | 3.01 | 4.91 | .52 | 2.10 | .71 | 1.54 | 1.94 | .19 | 1.43 | 1.32 |
| | 4.03 | 3.86 | 3.50 | 4.06 | .72 | 2.08 | .80 | 1.50 | 2.12 | .19 | 1.27 | 1.47 |
| | 3.34 | 3.20 | 3.50 | 3.59 | .53 | 1.78 | .66 | 1.25 | 1.88 | .27 | 1.40 | 1.14 |

* United States data are unofficial figures compiled from *Price Current-Grain Reporter*; Fort William and Port Arthur data are official figures for net receipts furnished by Canadian Board of Grain Commissioners; Vancouver data are official figures compiled from *Canadian Grain Statistics*. United States and Fort William and Port Arthur figures begin with weeks ending Dec. 8, 1923, Dec. 6, 1924, Dec. 5, 1925, Dec. 4, 1926; Vancouver figures are for weeks ending one day earlier.

^a Receipts at Prince Rupert included.

TABLE IV.—WORLD VISIBLE WHEAT SUPPLIES, APRIL 1, 1920-27, AND MONTHLY, 1926-27*
(Million bushels)

| Date | United States | Canada | Argentina | Australia | United Kingdom | Afloat to Europe | North America | Argentina, Australia | U.K. and afloat | Grand total | Total ex-Australia |
|-------------------|---------------|--------|-----------|-----------|----------------|------------------|---------------|----------------------|-----------------|-------------|--------------------|
| 1920 Apr. 1. | 94.9 | 28.2 | 6.6 | 60.0 | 10.9 | 59.7 | 123.1 | 66.6 | 70.6 | 260.3 | 200.3 |
| 1921 Apr. 1. | 51.7 | 40.6 | 3.7 | 73.0 | 18.4 | 58.2 | 92.3 | 76.7 | 76.6 | 245.6 | 172.6 |
| 1922 Apr. 1. | 69.4 | 63.3 | 4.8 | 50.0 | 6.5 | 65.9 | 132.7 | 54.8 | 72.4 | 259.9 | 209.9 |
| 1923 Apr. 1. | 102.1 | 81.8 | 9.2 | 56.5 | 7.8 | 52.8 | 183.9 | 65.7 | 60.6 | 310.2 | 253.7 |
| 1924 Apr. 1. | 111.3 | 123.3 | 10.6 | 40.0 | 8.5 | 65.8 | 234.6 | 50.6 | 74.3 | 359.5 | 319.5 |
| 1925 Apr. 1. | 108.8 | 80.0 | 11.4 | 63.0 | 11.7 | 84.1 | 188.8 | 74.4 | 95.8 | 359.0 | 296.0 |
| 1926 Apr. 1. | 82.0 | 99.0 | 6.6 | 30.5 | 7.7 | 46.0 | 181.0 | 37.1 | 53.7 | 271.8 | 241.3 |
| 1926 Aug. 1. | 64.2 | 28.3 | 4.1 | 6.2 | 4.3 | 38.6 | 92.5 | 10.3 | 42.9 | 145.7 | 139.5 |
| Sept. 1. | 117.1 | 16.6 | 4.0 | 3.6 | 5.8 | 35.7 | 133.7 | 7.6 | 41.5 | 182.8 | 179.2 |
| Oct. 1. | 135.1 | 43.4 | 4.5 | 1.4 | 5.4 | 35.4 | 178.5 | 5.9 | 40.8 | 225.2 | 223.8 |
| Nov. 1. | 137.4 | 81.3 | 3.2 | 0.0 | 3.7 | 37.8 | 218.7 | 3.8 | 41.5 | 264.0 | 264.0 |
| Dec. 1. | 133.0 | 123.0 | 1.8 | 2.0 | 3.6 | 36.9 | 256.0 | 3.8 | 40.5 | 300.3 | 298.3 |
| 1927 Jan. 1. | 123.7 | 123.4 | 2.6 | 81.0 | 4.7 | 43.2 | 247.1 | 83.6 | 47.9 | 378.6 | 297.6 |
| Feb. 1. | 110.2 | 118.9 | 8.1 | 80.0 | 4.7 | 59.1 | 229.1 | 88.1 | 63.8 | 381.0 | 301.0 |
| Mar. 1. | 104.3 | 116.7 | 14.1 | 64.0 | 4.2 | 70.1 | 221.0 | 78.1 | 74.3 | 373.4 | 309.4 |
| Apr. 1. | 88.7 | 107.3 | 14.8 | 53.0 | 4.9 | 75.8 | 196.0 | 67.8 | 80.7 | 344.5 | 291.5 |
| Average, Apr. 1 | | | | | | | | | | | |
| 1910-14. | 84.0 | 37.6 | 4.3 | 14.8 | 12.4 | 53.2 | 121.6 | 19.1 | 65.6 | 206.3 | 191.5 |
| 1920-26. | 88.6 | 73.7 | 7.6 | 53.3 | 10.2 | 61.8 | 162.3 | 60.9 | 72.0 | 295.2 | 241.9 |

* A joint compilation by Broomhall, the *Daily Market Record*, Minneapolis, and the *Daily Trade Bulletin*, Chicago; here summarized from Broomhall's *Corn Trade News* and the *Daily Trade Bulletin*. Includes some flour stocks.

TABLE V.—WEEKLY VISIBLE SUPPLIES OF WHEAT IN NORTH AMERICA, UNITED KINGDOM PORTS, AND AFLOAT TO EUROPE, DECEMBER-MARCH, 1926-27*
(Million bushels)

| Date | United States | Canada | U.K. ports | Afloat to Europe | Total | Date | United States | Canada | U.K. ports | Afloat to Europe | Total |
|--------------|---------------|--------|------------|------------------|-------|--------------|---------------|--------|------------|------------------|-------|
| Dec. 4. | 78.9 | 116.1 | 3.0 | 36.9 | 234.9 | Feb. 5. | 60.8 | 120.4 | 4.4 | 65.0 | 250.6 |
| 11. | 74.1 | 116.5 | 3.6 | 37.0 | 231.2 | 12. | 61.6 | 118.9 | 4.8 | 70.5 | 255.8 |
| 18. | 73.6 | 130.4 | 4.4 | 37.2 | 245.6 | 19. | 62.4 | 119.5 | 4.0 | 71.2 | 257.1 |
| 25. | 72.2 | 128.2 | 4.0 | 40.7 | 245.1 | 26. | 61.3 | 120.8 | 4.0 | 70.1 | 256.2 |
| Jan. 1. | 70.8 | 125.4 | 4.8 | 43.2 | 244.2 | Mar. 5. | 60.1 | 116.4 | 4.8 | 71.1 | 252.4 |
| 8. | 68.4 | 128.5 | 5.4 | 51.3 | 253.6 | 12. | 58.7 | 116.5 | 5.6 | 74.0 | 254.8 |
| 15. | 67.1 | 134.7 | 5.1 | 54.7 | 261.6 | 19. | 58.1 | 116.1 | 5.2 | 79.5 | 258.9 |
| 22. | 65.1 | 125.9 | 5.0 | 57.1 | 253.1 | 26. | 56.0 | 113.3 | 6.0 | 74.2 | 249.5 |
| 29. | 62.3 | 122.5 | 4.7 | 59.1 | 148.6 | | | | | | |

* United States data are *Bradstreet's*; Canadian data from *Canadian Grain Statistics*; United Kingdom and Afloat data from Broomhall's *Corn Trade News*. Canadian figures are for the days preceding the dates indicated in the above table, and include stocks in some elevators for the preceding week, but are adjusted to bring stocks in western country elevators into the correct week.

TABLE VI.—WHEAT STOCKS IN THE UNITED STATES AND CANADA, MARCH 1919-27*
(Thousand bushels)

| Year | United States (March 1) | | | | Canada (March 31) | | | | |
|-----------|-------------------------|----------|--------------------------------|-----------------------------------|-------------------|----------|--------------|------------|----------------|
| | Total | On farms | In country mills and elevators | Commercial visible (Bradstreet's) | Total | On farms | In elevators | In transit | In flour mills |
| 1919..... | 362,947 | 128,703 | 107,037 | 127,207 | 118,543 | 32,315 | 69,983 | 10,855 | 5,390 |
| 1920..... | 351,769 | 169,904 | 123,233 | 58,632 | 77,306 | 34,837 | 30,622 | 6,272 | 5,575 |
| 1921..... | 336,057 | 217,037 | 87,075 | 31,945 | 95,477 | 48,919 | 35,802 | 7,120 | 3,636 |
| 1922..... | 256,038 | 134,253 | 75,071 | 46,714 | 114,986 | 41,649 | 58,338 | 10,999 | 4,000 |
| 1923..... | 313,557 | 156,087 | 102,908 | 54,562 | 139,788 | 54,771 | 69,620 | 8,397 | 7,000 |
| 1924..... | 308,919 | 137,721 | 98,284 | 72,914 | 202,493 | 70,755 | 111,589 | 14,149 | 6,000 |
| 1925..... | 256,205 | 112,095 | 67,673 | 76,437 | 121,084 | 39,225 | 68,555 | 8,304 | 5,000 |
| 1926..... | 224,575 | 100,137 | 76,333 | 48,105 | 161,376 | 50,878 | 95,691 | 8,307 | 6,500 |
| 1927..... | 277,657 | 130,444 | 85,942 | 61,271 | 175,978 | 51,366 | 103,372 | 14,740 | 6,500 |

* Bradstreet's visible, and official data of U.S. Department of Agriculture and Dominion Bureau of Statistics. See especially *Agriculture Yearbooks*, *Canada Year Books*, *Price Current-Grain Reporter*, and press releases.

TABLE VII.—OCEAN CARGO RATES ON WHEAT AND CORN, WEEKLY, AUGUST 1926 TO MARCH 1927*
(Cents per bushel)

| Date | Canada to United Kingdom | New York to Liverpool ^a | Northern Range to United Kingdom | Northern Range to Genoa | Northern Pacific to United Kingdom | La Plata down river to United Kingdom | Karachi to United Kingdom | Australia to United Kingdom | Danube to United Kingdom | Azof-Black Sea to U.K. and Continent |
|------------|--------------------------|------------------------------------|----------------------------------|-------------------------|------------------------------------|---------------------------------------|---------------------------|-----------------------------|--------------------------|--------------------------------------|
| Aug. 6... | 10.6 | 6.1 | N.Q. | N.Q. | 19.9 | 17.6 | 12.4 | 24.4 | 11.1 | 9.1 |
| 13... | 10.6 | 6.1 | N.Q. | N.Q. | 19.8 | 17.6 | 12.4 | 27.6 | 11.1 | 9.3 |
| 20... | 10.6 | 8.4 | N.Q. | N.Q. | 19.5 | 15.9 | 12.4 | 27.7 | 13.0 | 9.3 |
| 27... | 11.4 | 9.1 | 10.6 | N.Q. | 19.5 | 14.6 | 12.4 | 26.0 | 11.7 | 9.3 |
| Sept. 3... | 10.6 | 9.1 | 10.6 | N.Q. | 20.3 | 13.3 | 12.4 | 26.3 | 12.7 | 9.4 |
| 10... | 14.2 | 9.1 | 10.6 | N.Q. | 20.3 | 14.6 | 12.4 | 26.0 | 14.0 | 10.4 |
| 17... | 14.2 | 9.1 | 11.4 | N.Q. | 22.9 | 21.1 | 13.3 | 26.0 | 14.3 | 12.4 |
| 24... | 15.4 | 12.1 | 15.2 | 13.6 | 24.4 | 21.1 | 13.6 | 26.6 | 15.9 | 13.0 |
| Oct. 1... | 15.4 | 12.1 | 15.2 | 15.2 | 24.4 | 21.1 | 13.6 | 26.6 | 17.5 | 14.3 |
| 8... | 15.2 | 13.6 | 13.6 | 15.2 | 23.6 | 21.1 | 13.6 | 26.6 | 18.2 | 14.9 |
| 15... | 19.7 | 16.7 | 16.7 | 22.8 | 23.7 | 25.0 | N.Q. | 27.6 | 18.2 | 15.0 |
| 22... | 25.0 | 21.2 | 23.5 | 25.8 | 30.0 | 30.8 | N.Q. | 30.8 | 22.1 | 20.1 |
| 29... | 25.8 | 22.7 | 23.5 | 24.2 | 30.8 | 32.5 | 21.1 | 34.1 | 24.0 | 21.4 |
| Nov. 5... | 25.8 | 22.7 | 23.5 | 21.2 | 30.0 | 29.2 | 21.1 | 34.1 | 23.4 | 20.1 |
| 12... | 25.8 | 24.2 | 24.2 | ... | 30.0 | 34.1 | 21.1 | 34.1 | 23.4 | 19.5 |
| 19... | 21.2 | 21.2 | 19.7 | 18.2 | 30.0 | 29.2 | 19.5 | 34.1 | 23.4 | 18.2 |
| 26... | 19.7 | 19.7 | 17.4 | 18.2 | 29.2 | 30.8 | 21.1 | 34.1 | 20.8 | 16.9 |
| Dec. 3... | 16.7 | 15.9 | 16.7 | 18.2 | 29.2 | 29.2 | 21.1 | 34.1 | 19.5 | 15.6 |
| 10... | 15.2 | 15.2 | 14.4 | 12.1 | 28.2 | 26.0 | 19.5 | 35.1 | 16.9 | 13.6 |
| 17... | 12.9 | 12.1 | 10.1 | 11.6 | 27.6 | 24.4 | 17.9 | 34.1 | 17.9 | 14.6 |
| 24... | 12.9 | 12.1 | 10.6 | 11.6 | 26.0 | 22.8 | 17.9 | 34.1 | 17.9 | 14.6 |
| 31... | 10.6 | 10.6 | 10.6 | 12.1 | 26.0 | 21.1 | 17.9 | 30.9 | N.Q. | N.Q. |
| Jan. 7... | 9.1 | 9.1 | 12.1 | 12.6 | 26.0 | 21.1 | 17.9 | 30.9 | N.Q. | N.Q. |
| 14... | 9.1 | 9.1 | 12.1 | 12.6 | 26.0 | 21.1 | 17.9 | 30.1 | N.Q. | N.Q. |
| 21... | 9.1 | 8.3 | 10.6 | 12.1 | 23.6 | 20.2 | 17.9 | 30.1 | 9.8 | 9.8 |
| 28... | 9.1 | 8.3 | 10.6 | 11.6 | 23.6 | 20.1 | 17.9 | 31.7 | 9.7 | 10.1 |
| Feb. 4... | 9.1 | 8.3 | 9.8 | 11.6 | 23.5 | 19.5 | 17.9 | 30.8 | 9.7 | 10.1 |
| 11... | 9.1 | 8.3 | 9.8 | 11.6 | 23.6 | 20.1 | 19.2 | 30.9 | 9.7 | 10.1 |
| 18... | 9.1 | 7.6 | 8.3 | 11.6 | 24.0 | 19.8 | 17.9 | 32.2 | 12.0 | 10.1 |
| 25... | 8.3 | 6.8 | 7.6 | 11.6 | 24.4 | 19.2 | 17.9 | 31.7 | 13.6 | 10.1 |
| Mar. 4... | 8.3 | 6.8 | 7.6 | 11.9 | 25.0 | 18.5 | 17.9 | 30.9 | 12.4 | 10.7 |
| 11... | 8.3 | 6.8 | 7.6 | 11.9 | 25.2 | 18.2 | 17.9 | 31.7 | 12.4 | 10.4 |

* Converted from weekly rates published in *International Crop Report and Agricultural Statistics*. "N.Q." indicates that no quotation was given.

^a Rates for parcels by liners.

THE WHEAT SITUATION, DECEMBER 1926 TO MARCH 1927

TABLE VIII.—INTERNATIONAL TRADE IN WHEAT AND FLOUR, MONTHLY, FROM JULY 1926*

(Million bushels)

A.—NET EXPORTS

| Month | United States | Canada | India | Australia | Argentina | Chile | Hungary | Jugo-Slavia | Poland | Algeria | Tunis | Egypt |
|-----------|---------------|--------|--------------------|-----------|-----------|------------------|---------|-------------------|--------------------|--------------------|--------------------|--------------------|
| July..... | 18.8 | 20.7 | 2.30 | 2.8 | 4.5 | .08 | .81 | .40 | .15 | .44 | .46 | (.87) ^a |
| Aug..... | 35.8 | 11.6 | 1.18 | 2.2 | 2.6 | .02 ^b | 3.50 | 1.45 | .28 | .43 | .26 | (.68) ^a |
| Sept..... | 29.3 | 13.2 | .46 | 1.6 | 2.1 | .02 ^b | 3.54 | 2.27 | .06 | .68 | .34 | (.84) ^a |
| Oct..... | 22.0 | 34.9 | .77 | 1.5 | 1.8 | .00 ^c | 3.75 | 1.43 | (.03) ^a | .11 | .29 | (.78) ^a |
| Nov..... | 17.8 | 49.6 | .92 ^b | 1.5 | 1.4 | .00 | 2.50 | 1.43 ^b | .03 | .17 | .24 | (.70) ^a |
| Dec..... | 13.0 | 48.8 | .50 ^b | 6.0 | 2.1 | .00 | 1.95 | .74 | (.10) ^a | (.11) ^a | .09 | (.67) ^a |
| Jan..... | 11.8 | 16.0 | .64 ^b | 15.2 | 14.9 | .00 | 1.05 | .... | (.27) ^a | (.32) ^a | ... | (.70) ^a |
| Feb..... | 7.8 | 14.8 | (.18) ^a | 14.2 | 15.2 | .04 | .75 | .... | (.05) ^a | (.45) ^a | (.14) ^a | (.81) ^a |
| Mar..... | 8.9 | 21.0 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Apr..... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| May..... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| June..... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| July..... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |

B.—NET IMPORTS

| Month | Irish Free St. | United Kingdom | France ^d | Germany | Belgium | Italy | Netherlands | Scandinavia | Switzerland | Czecho-Slovakia | Baltic States ^e | Japan |
|-----------|----------------|----------------|---------------------|---------|---------|-------|-------------|-------------|-------------|-----------------|----------------------------|-------------------|
| July..... | 1.55 | 18.65 | 1.02 | 12.04 | 3.89 | 8.14 | 2.09 | 1.22 | 2.33 | 2.79 | .71 | .01 |
| Aug..... | 1.50 | 20.98 | 2.80 | 13.59 | 3.51 | 3.60 | 2.26 | 1.37 | 1.66 | .78 | .64 | .93 ^b |
| Sept..... | 1.49 | 17.48 | 2.62 | 5.46 | 2.78 | 3.30 | 3.90 | 1.48 | 1.62 | 2.13 | .72 | .81 ^b |
| Oct..... | 1.47 | 14.62 | 1.99 | 6.92 | 2.42 | 3.46 | 2.02 | 1.82 | 2.10 | 1.93 | .71 | 1.47 |
| Nov..... | 1.57 | 14.82 | 1.39 | 5.97 | 2.76 | 6.70 | 2.34 | 1.64 | 1.53 | 1.86 | 1.02 | 1.12 ^b |
| Dec..... | 1.72 | 16.71 | 3.02 | 5.28 | 2.88 | 6.68 | 1.98 | 1.45 | 1.03 | 2.34 | .74 | 1.43 ^b |
| Jan..... | 1.16 | 17.35 | 7.31 | 4.76 | 2.98 | 8.23 | 2.03 | 1.48 | .81 | .77 | .55 | 1.80 ^b |
| Feb..... | 1.60 | 15.81 | 7.89 | 4.66 | 3.32 | 9.41 | 2.07 | 1.17 | 1.38 | 1.26 | .11 ^f | 1.31 |
| Mar..... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| Apr..... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| May..... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| June..... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |
| July..... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |

* Data from official sources and International Institute of Agriculture.

^a Net imports.^b Gross, not net.^c Net imports of 1,200 bushels.^d Probably understatements.^e Finland, Esthonia, Latvia.^f Esthonia and Latvia only.

TABLE IX.—WEEKLY WHEAT AND FLOUR SHIPMENTS BY AREAS OF ORIGIN AND DESTINATION, DECEMBER—MARCH, 1926-27*

(Million bushels)

| Week ending | North America | Argentina, Uruguay | Australia | Russia, Danube | India | Other countries | Total | To Europe | To ex-Europe |
|-------------|---------------|--------------------|-----------|----------------|-------|-----------------|-------|-----------|--------------|
| Dec. 4.... | 9.70 | .39 | .31 | 1.18 | .00 | .92 | 12.54 | 10.05 | 2.49 |
| 11.... | 9.56 | .20 | .20 | 2.62 | .00 | .80 | 13.38 | 11.37 | 2.01 |
| 18.... | 9.93 | .49 | .28 | .98 | .01 | .80 | 12.49 | 10.75 | 1.74 |
| 25.... | 13.06 | .04 | 2.06 | 1.52 | .00 | .80 | 17.48 | 15.83 | 1.65 |
| Jan. 1.... | 12.42 | .83 | 1.85 | 1.08 | .05 | .92 | 17.15 | 15.00 | 2.15 |
| 8.... | 13.86 | .74 | 3.11 | 1.27 | .18 | .76 | 19.92 | 17.18 | 2.74 |
| 15.... | 10.81 | 1.96 | 3.18 | 1.32 | .02 | .64 | 17.93 | 15.64 | 2.29 |
| 22.... | 7.93 | 3.52 | 4.99 | .47 | .03 | .44 | 17.38 | 14.65 | 2.73 |
| 29.... | 10.14 | 4.13 | 3.51 | .79 | .00 | .60 | 19.17 | 14.91 | 4.26 |
| Feb. 5.... | 9.27 | 6.30 | 4.04 | 1.64 | .00 | .48 | 21.73 | 19.32 | 2.41 |
| 12.... | 7.96 | 6.80 | 2.69 | 1.24 | .00 | .64 | 19.33 | 16.67 | 2.66 |
| 19.... | 6.45 | 5.84 | 3.67 | .98 | .00 | .56 | 17.50 | 14.18 | 3.32 |
| 26.... | 7.34 | 6.31 | 4.03 | .42 | .00 | .48 | 18.59 | 14.96 | 3.63 |
| Mar. 5.... | 7.17 | 5.16 | 2.84 | .94 | .00 | .40 | 16.51 | 14.59 | 1.92 |
| 12.... | 7.88 | 5.74 | 6.26 | 1.23 | .00 | .36 | 21.47 | 18.09 | 3.38 |
| 19.... | 8.66 | 7.58 | 4.45 | 1.02 | .00 | .32 | 22.03 | 18.42 | 3.61 |
| 26.... | 7.15 | 4.92 | 1.73 | .28 | .00 | .24 | 14.32 | 11.04 | 3.28 |

* Here converted from data in Broomhall's *Corn Trade News*. Broomhall's weekly figures do not always check with his cumulative totals, which presumably include later revisions.

TABLE X.—APPROXIMATE DISPOSITION OF WHEAT SUPPLIES IN FOUR LEADING EXPORTING COUNTRIES, 1924-25 AND 1925-26, WITH TENTATIVE FORECASTS FOR 1926-27*

(Million bushels)

| | United States (July-June) | | | Canada (Aug.-July) | | | Argentina (Aug.-July) | | | Australia (Aug.-July) | | |
|---------------------|---------------------------|--------------------|--------------------|--------------------|--------------------|---------|-----------------------|---------|---------|-----------------------|---------|---------|
| | 1924-25 | 1925-26 | 1926-27 | 1924-25 | 1925-26 | 1926-27 | 1924-25 | 1925-26 | 1926-27 | 1924-25 | 1925-26 | 1926-27 |
| Initial stocks..... | 106.2 | 86.4 | 60.2 | 45.2 | 25.5 | 34.8 | 59.6 | 57.2 | 59.1 | 41.2 | 36.2 | 28.4 |
| New crop..... | 864.4 | 676.4 | 832.3 | 262.1 ^a | 433.2 ^b | 409.8 | 191.1 | 191.1 | 222.8 | 164.6 | 113.4 | 164.4 |
| Total supplies.... | 970.6 | 762.8 | 892.5 | 307.3 | 458.7 | 444.6 | 250.7 | 248.3 | 281.9 | 205.8 | 149.6 | 192.8 |
| Seed requirements. | 87.6 | 83.3 | 85.0 | 38.5 | 39.8 | 41.0 | 23.1 | } 94.8 | } 81.9 | } 35.6 | } 33.0 | } 35.0 |
| Consumption..... | 475.0 ^c | 487.0 ^c | 487.0 ^c | 42.1 | 42.3 | 42.5 | } 47.3 | | | | | |
| Feed and waste.... | 66.9 ^d | 38.9 ^d | 55.5 ^d | 9.1 ^e | 17.7 | 26.1 | | | | | | |
| Stocks at end..... | 86.4 | 60.2 | 75.0 | 25.5 | 34.8 | 40.0 | 57.2 | 59.1 | 70.0 | 36.2 | 28.4 | 56.8 |
| Total deductions.. | 715.9 | 669.4 | 702.5 | 115.2 | 134.6 | 149.6 | 127.6 | 153.9 | 151.9 | 82.2 | 72.4 | 102.8 |
| Net exports..... | 254.7 ^e | 93.4 ^e | 190.0 ^e | 192.1 | 324.1 | 295.0 | 123.1 | 94.4 | 130.0 | 123.6 | 77.2 | 90.0 |

* Based upon official data so far as possible. Data are more comprehensive and accurate for the United States and Canada than for Argentina and Australia. Figures for 1926-27 are tentative for all countries.

^a The official estimate of 262.1 million bushels appears to be too low. Items of disposition except feed and waste may be accepted as substantially accurate; but this item, which is calculated as a residual, appears impossibly low.

^b Official estimate of 411.4 million bushels plus officially calculated apparent underestimate of 21.8 million bushels. See *Monthly Bulletin of Agricultural Statistics*, January 1927, XX, 23.

^c Calculated from population estimates, assumed per capita flour consumption of .9 barrel, and rates of extraction reported for identical mills to Census Bureau adjusted to cover all mills. Our earlier calculations, based upon reported mill grindings of identical mills raised to 100 per cent on the basis of the 1923 census, now appear to have been too high. See *WHEAT STUDIES*, December 1926, III, 137, and January 1927, III, 175.

^d Calculated as a residual; affected by changes in invisible stocks.

^e Including shipments to possessions of 2.8 to 3.0 million bushels.

TABLE XI.—WEEKLY CASH PRICES OF REPRESENTATIVE WHEATS IN LEADING EXPORTING AND IMPORTING MARKETS, NOVEMBER—MARCH, 1926-27*

(U.S. dollars per bushel)

| Month | United States | | | | Canada | | Argentina | Liverpool | | | | | |
|--------------|------------------------------|---------------------------------|-----------------------------------|---------------------------------|---------------------------|---------------------------|-------------------------|----------------|----------------|---------------|--------------|------------------|------------|
| | No. 2 Red Winter (St. Louis) | No. 2 Hard Winter (Kansas City) | No. 1 Dark Northern (Minneapolis) | No. 2 Amber Durum (Minneapolis) | No. 1 Manitoba (Winnipeg) | No. 3 Manitoba (Winnipeg) | Barletta (Buenos Aires) | No. 1 Manitoba | No. 3 Manitoba | South Russian | No. 2 Winter | Argentine Rosafé | Australian |
| Nov. | 1.37 | 1.38 | 1.49 | 1.63 | 1.46 | 1.37 | 1.61 | 1.81 | 1.74 | 1.76 | 1.76 | 1.71 | 1.74 |
| | 1.39 | 1.39 | 1.50 | 1.66 | 1.42 | 1.33 | 1.62 | 1.83 | 1.73 | 1.79 | 1.74 | 1.67 | 1.74 |
| | 1.34 | 1.34 | 1.45 | 1.55 | 1.39 | 1.28 | 1.52 | 1.80 | 1.71 | 1.73 | 1.71 | 1.69 | 1.74 |
| | 1.34 | 1.36 | 1.44 | 1.60 | 1.39 | 1.29 | 1.47 | 1.77 | 1.66 | 1.64 | 1.68 | 1.61 | 1.70 |
| Dec. | 1.38 | 1.37 | 1.46 | 1.64 | 1.35 | 1.23 | 1.41 | 1.76 | 1.64 | 1.64 | 1.70 | 1.59 | 1.70 |
| | 1.39 | 1.39 | 1.49 | 1.72 | 1.32 | 1.22 | 1.36 | 1.74 | 1.66 | 1.68 | 1.71 | 1.59 | 1.70 |
| | 1.37 | 1.37 | 1.46 | 1.78 | 1.31 | 1.21 | 1.33 | 1.68 | 1.62 | 1.67 | 1.65 | 1.54 | 1.65 |
| | 1.36 | 1.38 | 1.49 | 1.81 | 1.35 | 1.24 | 1.35 | 1.70 | 1.62 | 1.67 | 1.66 | 1.56 | 1.65 |
| Jan. | 1.34 | 1.37 | 1.47 | 1.74 | 1.32 | 1.21 | 1.32 | 1.68 | 1.62 | 1.62 | 1.64 | 1.56 | 1.65 |
| | 1.37 | 1.36 | 1.46 | 1.72 | 1.34 | 1.22 | 1.29 | 1.65 | 1.62 | 1.61 | 1.64 | 1.56 | 1.66 |
| | 1.38 | 1.38 | 1.47 | 1.66 | 1.33 | 1.21 | 1.28 | 1.66 | 1.60 | 1.55 | 1.63 | 1.56 | 1.65 |
| | 1.37 | 1.38 | 1.47 | 1.63 | 1.36 | 1.23 | 1.30 | 1.68 | 1.57 | 1.61 | 1.63 | 1.55 | 1.64 |
| Feb. | 1.38 | 1.38 | 1.47 | 1.71 | 1.40 | 1.27 | 1.32 | 1.73 | 1.60 | 1.62 | 1.68 | 1.64 | 1.64 |
| | 1.38 | 1.37 | 1.46 | 1.65 | 1.40 | 1.27 | 1.32 | 1.73 | 1.61 | 1.62 | 1.64 | 1.60 | 1.64 |
| | 1.37 | 1.36 | 1.46 | 1.57 | 1.39 | 1.26 | 1.32 | 1.71 | 1.61 | 1.62 | 1.61 | 1.58 | 1.56 |
| | 1.35 | 1.35 | 1.46 | 1.60 | 1.39 | 1.27 | 1.31 | 1.72 | 1.61 | 1.64 | 1.60 | 1.58 | 1.64 |
| Mar. | 1.32 | 1.34 | 1.46 | 1.58 | 1.40 | 1.28 | 1.30 | 1.74 | 1.60 | 1.65 | 1.59 | 1.56 | 1.63 |
| | 1.32 | 1.35 | 1.46 | 1.54 | 1.45 | 1.33 | 1.32 | 1.74 | 1.60 | 1.62 | N. Q. | 1.54 | 1.63 |
| | 1.33 | 1.35 | 1.46 | 1.63 | 1.43 | 1.31 | 1.32 | 1.75 | 1.63 | N. Q. | 1.53 | 1.56 | N. Q. |
| | 1.32 | 1.33 | 1.42 | 1.52 | 1.42 | 1.30 | .... | .... | 1.62 | .... | .... | 1.56 | .... |
| | 1.26 | 1.29 | 1.38 | 1.58 | 1.42 | 1.29 | .... | .... | 1.56 | .... | .... | 1.53 | .... |

* United States prices from *Crops and Markets*; foreign prices from *International Crop Report and Agricultural Statistics*, except Rosafé and No. 3 Manitoba at Liverpool, which are from *Broomhall's Corn Trade News*, and No. 3 Manitoba at Winnipeg, which is from the *Grain Trade News*. United States prices are weekly averages of daily weighted prices for weeks ending Friday. Foreign prices are for Friday of each week, except Rosafé and No. 3 Manitoba at Liverpool, which are for Tuesday of the same week.

TABLE XII.—MONTHLY PRICES OF DOMESTIC WHEAT IN EUROPE, FROM AUGUST 1924*

(U.S. dollars per bushel)

| Month | Great Britain | | | France (Chartres) | | | Italy (Milan) | | | Germany (Berlin) | | |
|----------------|---------------|---------|---------|-------------------|---------|---------|---------------|---------|---------|------------------|-------------------|---------|
| | 1924-25 | 1925-26 | 1926-27 | 1924-25 | 1925-26 | 1926-27 | 1924-25 | 1925-26 | 1926-27 | 1924-25 | 1925-26 | 1926-27 |
| Aug. | 1.54 | 1.53 | 1.76 | 1.50 | 1.62 | 1.61 | 1.40 | 1.88 | 1.85 | 1.29 | 1.55 | 1.75 |
| Sept. | 1.45 | 1.48 | 1.46 | 1.54 | 1.57 | 1.77 | 1.49 | 1.94 | 2.03 | 1.46 | 1.38 | 1.71 |
| Oct. | 1.52 | 1.34 | 1.48 | 1.62 | 1.48 | 1.88 | 1.77 | 1.94 | 2.21 | 1.47 | 1.37 | 1.72 |
| Nov. | 1.56 | 1.45 | 1.62 | 1.71 | 1.37 | 1.96 | 1.83 | 1.99 | 2.20 | 1.37 | 1.49 | 1.78 |
| Dec. | 1.54 | 1.60 | 1.55 | 1.77 | 1.33 | 1.78 | 1.94 | 2.12 | 2.31 | 1.44 | 1.62 | 1.74 |
| Jan. | 1.66 | 1.60 | 1.55 | 1.87 | 1.39 | 1.88 | 2.21 | 2.17 | 2.13 | 1.64 | 1.61 | 1.72 |
| Feb. | 1.74 | 1.54 | 1.54 | 1.89 | 1.42 | 1.81 | 2.31 | 2.16 | 2.11 | 1.63 | 1.60 | 1.72 |
| Mar. | 1.70 | 1.51 | .... | 1.87 | 1.39 | 1.70 | 2.09 | 2.14 | .... | 1.63 | 1.66 | .... |
| Apr. | 1.58 | 1.57 | .... | 1.77 | 1.40 | .... | 1.86 | 2.20 | .... | 1.60 | 1.87 | .... |
| May | 1.64 | 1.75 | .... | 1.85 | 1.39 | .... | 1.93 | 2.19 | .... | 1.70 | 1.92 ^a | .... |
| June | 1.67 | 1.77 | .... | 1.75 | 1.52 | .... | 1.80 | 2.20 | .... | 1.73 | N. Q. | .... |
| July | 1.55 | 1.84 | .... | 1.64 | 1.53 | .... | 1.63 | 1.98 | .... | 1.74 | N. Q. | .... |

* Data for Great Britain are averages of weekly average Gazette prices as given in the *Economist*; for France, averages of Saturday prices furnished directly by Federal Reserve Board; for Italy, averages of Friday prices of soft wheat as given in *International Crop Report and Agricultural Statistics*; for Germany, monthly average prices as given in *Wirtschaft und Statistik*. All data are converted, for convenience, from the domestic currency in which they are quoted in the above sources into U.S. money by monthly average exchange rates. "N. Q." indicates that no quotation was given.

^a First half of May.

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