WHEAT STUDIES

OF THE

FOOD RESEARCH INSTITUTE

VOL. III, NO. 3 JANUARY 1927

SURVEY OF THE WHEAT SITUATION

AUGUST TO NOVEMBER, 1926

THE PERIOD under review was noteworthy for a spectacular advance in ocean freight rates between mid-September and early November. This development caused importers, who at first chiefly bore the incidence of increased transport costs, to seek supplies in near-at-hand sources and to limit distant purchases. The volume of international trade as compared with previous years was heavy in August and September when American wheat moved freely, but was curtailed during October and November. Price relationships were dislocated: Liverpool prices fluctuated much more than prices in exporting markets.

The world wheat crop, exclusive of Russia, is the largest in recent years except 1923. Crops in exporting areas are generally excellent; those in importing areas are moderately good. The increasing ease in the international statistical position has not yet exerted its full influence. With lower freight rates and large supplies of wheat available in Canada, Argentina, and Australia, we anticipate a decline in world wheat prices from their late November level. United States prices of representative wheats may not share the decline, since our surplus of these wheats was largely exported by December 1. Assuming declines in prices and freight rates, and on the basis of current information concerning world crops and tariff and consumption regulations abroad, we estimate net imports for 1926–27 at 780 million bushels—a larger volume than in any year except 1923–24 and considerably above recent trade estimates. Carryovers are likely to be substantially larger than last year.

STANFORD UNIVERSITY, CALIFORNIA

January 1927

WHEAT STUDIES

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 2*s.*, will be accepted by the Northern Publishing Co., Ltd., 16, Fenwick Street, Liverpool, England.

Published by Stanford University for the Food Research Institute.
Entered as second-class matter February 11, 1925, at the post-office
at Stanford University, California, under the Act of August 24, 1912

WHEAT STUDIES

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VOL. III, NO. 3 JANUARY 1927

SUPPLEMENT

The following statement presents, in their bearing upon our analysis, certain facts that have become available while our "Survey of the Wheat Situation, August to November, 1926" was going through the press.

Revisions in Crop Estimates

The revised official estimates of the United States crops of 1925 and 1926, announced on December 20, are as follows, in million bushels:

	Winter	Spring	Total
1925 Final.....	395.6	270.9	666.5
Revised	401.7	274.7	676.4
1926 Oct. 1.....	626.5	213.3	839.8
Final	626.9	205.4	832.3

The increase in the estimate for 1925, raising figures for both winter and spring wheats, still seems to us to leave the total below the truth, although our tentative figure of 700 million bushels may be somewhat excessive because we have probably overestimated wheat milled for consumption. The revision in the estimate of the 1926 crop consists chiefly of a reduction of 8 million bushels in spring wheat. If the revised estimate of the 1925 crops is too low, the final estimate for 1926 may also be too low, if it is based on an underestimate of acreage. It is significant that the trade generally had apparently anticipated an increase, rather than a decrease, from the previous official estimate.

The downward revision strengthens our belief that 170 million bushels is a reasonable estimate of net exports from the United States (including shipments to possessions) during the crop year. If net exports should considerably exceed our forecast, we believe it would imply an underestimate of the 1926 crop.

On December 22 the Northwest Grain Dealers' Association lowered its estimate of the crop of the Canadian Prairie Provinces from 377 to 371 million bushels; the present estimate is 10 million bushels below the official figure issued November 11. We are nevertheless disposed not to alter our figures until the final official estimate, prepared with the aid of complete census data on acreage, appears in January.

As had been expected, the estimate of the Jugo-Slavian crop has been reduced—from 78 to 71 million bushels.

Latest news from Argentina and Australia is conflicting, but seems on the whole to point to an outturn above rather than below the preliminary figures we have employed. Comment on quality continues to be favorable. Both countries have already begun to export new-crop wheat, and Australian shipments are said to be the earliest in ten years.

Marketing and Stocks

Receipts at primary markets in the United States during late November and the first three weeks of December ran below receipts during corresponding periods of each of the past three years. Apparently farmers continued reluctant to market freely at prevailing prices, and visible supplies have declined appreciably in December. Canadian receipts at country elevators and at the head of the lakes have tended downward since the middle of November. Although total visible supplies of Canadian

wheat have risen slightly, Canadian wheat in bond in the United States has increased considerably, as usual at this season. In consequence of light shipments, especially from distant sources, stocks afloat and in British ports remain low. A moderate decline in world visible supplies since mid-November has contributed to maintain prices.

International Shipments

International shipments (Broomhall) showed a normal seasonal decline during the three weeks ending December 18; only 38 million bushels were shipped as against 45 million for the first three weeks of November. Russian shipments, some 4.4 million bushels, comprised about 10 per cent of the total. Shipments from Russia from August 1 to December 18 have this year reached nearly 20 million bushels, surpassing the combined total of Argentine and Australian shipments during the period for the first time since the war. Last year Russian shipments for the corresponding period were only about 12 million bushels. In view of the collections and exports to date, the plan to keep certain Black Sea ports open during the winter, and the probability that Broomhall's figures understate actual exports, net exports from Russia during 1926–27 seem more likely to exceed than to fall below our tentative forecast of 40 million bushels.

Prices

Prices during December remained approximately at the level of late November, with a tendency to sag. Support was furnished, particularly in Chicago and Winnipeg, by declines in visible supplies and by the crop reports above mentioned. The technical position of the market dominated day-to-day fluctuations in Chicago, where prices showed some evidence of a shift toward a domestic basis. We continue to anticipate a weakening of world prices when shipments from the Southern Hemisphere get well under way.

Fall Sowings

Despite unfavorable weather in many countries prior to November, prospects for 1927 crops are good for this season of the year. Winter wheat acreage sown in the United States was officially estimated on December 21 as 41.8 million acres as compared with 39.8 million last year. The implied increase of over 5 per cent, though considerably less than was suggested by official reports of farmers' intentions, is so substantial that a larger harvested acreage is probable even though winter-killing should be much heavier than last year. The reported condition figure, 81.8 per cent, is again fairly low, as it was on December 1, 1925 and 1926, but little significance can be attached to this figure.

At least normal acreages of winter wheat sowings are unofficially reported from most other countries of the Northern Hemisphere, France and parts of North Africa perhaps excepted. Substantial increases are believed to have occurred in Germany and Hungary.

The supply of sub-soil moisture in the North American spring-wheat belt is excellent.

Stanford University, California
December, 28, 1926

SURVEY OF THE WHEAT SITUATION

AUGUST TO NOVEMBER, 1926

SUMMARY

The present survey covers the first third of what may be termed the international crop year. This is a crucial period in the development of important wheat crops. The developments of this period are not merely of interest in themselves; they also furnish a reasonable basis for appraising the outlook for world wheat trade and prices during the ensuing six months and the crop year as a whole.

Two features of the period this year were of outstanding importance. The first was the gradual easing of the international statistical position; abundant exportable supplies were available or in clear prospect by December first, chiefly as a result of crop developments in Canada and the Southern Hemisphere. The second was the most extreme advance in ocean freight rates of recent years—the result of the prolonged strike of British coal miners. This created unusual risks for traders, altered the volume and direction of international trade, caused heavy accumulations of stocks in some exporting countries, and dislocated price relationships. Because of the freight situation and other factors, the actual position of international markets during the period remained tighter than was suggested by the statistical position at the close.

Crop developments throughout the period were less striking than in many years. No countries harvested bumper crops, no serious catastrophes occurred. In Europe, by and large, the harvests now appear somewhat smaller and somewhat poorer in quality than earlier indications had suggested. In the United States, spring wheats (including durum) yielded poorly, in sharp contrast to winter wheats, but the total crop is little below August 1 forecasts. In Canada, Australia, and Argentina, prospects for good crops were gradually realized. The Canadian crop, although threshed under unfavorable weather conditions, turned out to be nearly as large as last year's, though somewhat poorer in quality. Bright prospects in Australia were not dimmed during the period. In Argentina an exceptionally mild winter, which had promoted too advanced growth, limited the outturn but did not prevent its reaching a larger total than is usually harvested.

Although crops of the Southern Hemisphere are not yet fully made, detailed estimates summarized in Table 1 indicate a world wheat crop (exclusive of Russia and China) about as large as the excellent crop of 1925, only about 120 million smaller than the bumper crop of 1923 (when Russia's crop was much less), and well above both prewar and post-war averages. The Northern Hemisphere crop is not materially smaller than last year; that of the Southern Hemisphere is larger, possibly the largest in history. As between exporting and importing countries, the distribution of the 1926 crop is very different from that of 1925. Except in North Africa and India, good crops prevail in exporting countries. The American, Australian, and Argentine crops are materially superior to last year's. Those of the lower Danube basin are nearly as large as in 1925, when they were the largest since the war. The same appears to be true of Soviet Russia. On the other hand, in European importing countries the total crop is smaller than that of 1925 by about 150 million bushels, though still of average size. Quality is poor in most European countries and tough grain predominates in Canada; but good quality prevails in the United

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States, Russia, and the Southern Hemisphere.

Ocean freight rates, after ruling higher than usual during the summer, advanced sharply in mid-September, following a rush for tonnage to transport coal from the United States to Great Britain. In the course of eight weeks rates on wheat shipments (parcels by liners) rose from 9.1 to 24.2 cents per bushel on the New York–Liverpool route, and corresponding advances occurred on other routes. Early in November, when the flurry in chartering for coal transport had passed, rates declined rapidly, but the level remained abnormally high. The burden of increased shipping costs was shared by exporters and importers, but importers apparently bore the larger share at least until late in the period.

International trade in the first half of the period was fairly heavy, because European importers could draw heavily upon American winter wheats to reinforce their low carryovers until new domestic wheats became available. The advance in ocean freights altered the volume and disturbed the course of trade. Ex-European importers continued to purchase moderately. European importers, equally anxious to avoid the burden of increased transportation costs, bought less heavily from distant sources of supply than they would otherwise have done, and sought supplies of domestic and near-at-hand wheats. In October–November, and for August–November as a whole, the volume of trade fell below what was to have been expected in view of importers' requirements for the season and the year as a whole. In the last two months international shipments were on a level with those of 1925. The policy of hand-to-mouth purchasing was increasingly justified as crop developments assured a much easier supply position.

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	...	138	810	2,543	146	156	2,893
1921	250	99	815	301	172[c]	172	1,044	2,733	129	191	3,109
1922	367	76	868	400	202[c]	171	873	2,809	109	196	3,163
1923	372	107	797	474	327[c]	267	994	3,063	125	247	3,490
1924	361	85	863	262	382	208	850	2,677	165	191	3,082
1925	329	105	676	411	577[d]	305	1,094	2,972[e]	113	191	3,331[e]
1926	325	90	832	406	...	299	946[e]	2,948[e]	154	215	3,370[e]
Average											
1909–13	352	92	690	197	759	209	1,139	2,725	90	147	3,005
1920–25	343	89	809	352	332	210	944	2,800[e]	131	195	3,178[e]

* Compiled from official data, here as published by U.S. Department of Agriculture. We regard the official estimates for Canada in 1924 and 1925, and for the United States in 1925, as below the truth. See WHEAT STUDIES, December 1926, III, 80, 137.

[a] Hungary, Bulgaria, Roumania, Jugo-Slavia.

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

[c] Excluding Transcaucasia and Turkestan.

[d] For 1925 we have accepted the figures of the International Institute of Agriculture.

[e] Partially estimated.

American farmers marketed very freely in July and August, but slowly thereafter. In Canada the movement was delayed by wet weather, but attained large volume in October and November. European farmers for the most part marketed slowly up to the end of October, but rapidly thereafter. In Soviet Russia the government purchasing campaign began slowly, but gathered such momentum that collections for export considerably exceeded those of 1925. Exportable supplies accumulated heavily in North America, where visibles rose to exceptional heights; and the early harvest of Southern Hemisphere crops gave promise of still heavier accumulations.

Wheat prices in general fluctuated within relatively narrow limits, on a level averaging about as high as in August-November 1924 and 1925, much higher than in 1923, but below the high levels characteristic of the crop years 1924–25 and 1925–26. Com-

parative absence of violent fluctuations was due mainly to the facts that no radical changes in estimates of crops or exportable surpluses were made during the period, and that no serious buying or selling pressure developed. There were some exceptions to the general stability. The rise in futures and cash prices in Liverpool was considerably sharper than elsewhere in late September and October, on account of the freight situation. Prices of durum wheat in the United States fell heavily as the new crop was harvested, but rose greatly in October and November. Prices of American hard spring-wheat also changed radically before and after harvest. Continental European prices showed wide variations from country to country, and were greatly influenced by local conditions as well as by import prices.

For the crop year 1926–27 the available surpluses in exporting countries now appear to exceed essential importers' requirements by a wide margin, and in the next few months the international position should be distinctly easier than in the corresponding periods of 1924–25 and 1925–26. We therefore anticipate a decline in world wheat prices, which have been sustained in recent months by several factors already mentioned. Assuming a level of wheat prices below that prevailing in the last half of November and a gradual downward trend in freight rates (apart from seasonal influences), and on the basis of present information regarding quantities and qualities of 1926 crops, tariffs and consumption regulations in Europe, and international purchasing power, we are disposed to estimate net exports at 790 million bushels and net imports at 780, a larger volume than in any year except 1923–24 and considerably above recent estimates by the trade; and to predict substantial increases in carryovers at the end of the crop year. Subsequent developments, however, may alter the basis of these estimates, and prospects for 1927 crops may exert material influence upon trade, prices, and carryovers in the closing months of the crop year.

United States prices of wheats other than durum and Pacific white may not share in the decline which we anticipate in world wheat prices, but may range somewhat above an export basis because so large a portion of our export surplus was shipped before December 1.

I. CROP DEVELOPMENTS, AUGUST–NOVEMBER

Crop developments, particularly in Canada and the Southern Hemisphere, exert an important influence on the world's wheat trade and prices during August–November, and subsequently until South American crops are assured. Normally, this influence is exerted chiefly through its effect on exporters' surpluses and importers' requirements for the crop year as a whole. This year there have been few serious disappointments of early expectations; developments in the principal exporting countries have been moderately favorable; and importers' hopes have gradually matured into assurances that, for the first time in two years, exporting countries will have ample surpluses to meet import requirements for the year as a whole.[1]

[1] See Section VI below.

[2] For a comparison of private and official estimates monthly from April 1 to October 1, see WHEAT STUDIES, December 1926, III, 130, Appendix Table VII.

THE UNITED STATES

In the United States crop developments since August 1 have been inconsiderable and have had little market influence. Official estimates between August 1 and October 1 were altered only about a million bushels. Private estimators tended to increase their estimates for both spring- and winter-wheat crops on September 1, and to make reduction in spring-wheat estimates on October 1.[2] This reflected good harvesting weather in the important western hard-wheat region during August, and some better reports of early threshing returns in the spring-wheat areas, whereas during September rainy weather retarded threshing everywhere and resulted in some damage by sprouting and molding of shocked wheat, particularly in the soft-wheat regions east of the Mississippi. The crop of hard red winter wheat suffered little or no damage.

The official estimate as of October 1 for the crop as a whole was 840 million bushels. The final estimate, published December 20, was 7.5 million bushels below this figure.[1] The 1926 crop is thus of good size, and about 156 million bushels larger than the crop of 1925, according to the revised estimate (published December 20) of 676 million bushels for the 1925 crop. The crop of hard red winter is the largest since 1919; crops of soft red winter and Pacific white wheats are of about average size and much above those of 1925; but spring-wheat crops, including durum, are the smallest since 1923.[2] The crop of hard red winter is excellent in quality as well as in size, owing partly to highly favorable weather for cutting and threshing. The crops of hard red spring and durum are only fair in quality; and much late-harvested soft red winter wheat was marketed when moist. Pacific white wheats are unusually smutty.

CANADA

During August, September, and early October, crop developments in Canada and changing estimates of the crop exerted an important influence on world wheat markets. In general the harvesting season was unfavorable, yet the crop appears much larger than early official forecasts suggested and exceeds trade expectations of early August.

Cool, rainy weather during the first three weeks in August was highly beneficial to late-sown grain after the prolonged drought and heat of late July, but prejudicial to grain already cut. Harvesting became general about the middle of August, though somewhat later than had been expected, and progressed favorably during the excellent weather of the last week. Except for a few days around the tenth, September was cold and rainy. Snow fell in Alberta and western Saskatchewan, and cutting and threshing operations everywhere were largely suspended. During October the weather was unsettled, but threshing progressed during occasional dry spells and was practically completed by mid-November.[3] As a whole the harvest season was even worse than that of 1925 (when threshing was seriously interrupted from late September to late October) and resulted in an even larger proportion of tough and low-grade wheat.

In spite of weather difficulties, the outturn has equaled or exceeded earlier expectations. The official forecast of July 31—317 million bushels for Canada and 297 million for the Prairie Provinces alone—was generally regarded on the date of issue (August 10) as too low, especially in view of the beneficial rains of early August. The second official forecast, as of August 31, put the crop at 399 million bushels, including 376 million for the Prairie Provinces. This figure was more in accord with those of private estimators. Although in late September reports were current that sufficient damage had been suffered to reduce the crop by 30 million bushels, unofficial estimates for the Prairie Provinces as of October 1 and November 1 ranged from 354 to 378 million bushels. The official estimate as of October 31, based upon a census enumeration of acreage (except in Saskatchewan) and direct estimates of yield per acre from correspondents,[4] was 381 million bushels for the Prairie Provinces and 406 million for all Canada. These figures are roughly in line with most of the current trade estimates, though the Canadian Pacific Railway estimates 405 million bushels for the Prairie Provinces alone. The Canadian crop is a large one, clearly surpassed only by the crop of 1925[5] and the bumper crop of 474 million bushels in 1923.

The crop runs light in weight and was undoubtedly much damaged by the wet harvesting weather. The official report (as of September 30) on weight per measured bushel put the 1926 crop of spring wheat at 96 per cent of the 10-year average, against 101 per cent for the crop of 1925. Of cars

[1] See the Supplement to this issue for further comments on the revised estimate, which was not available until this survey was in proof.

[2] See WHEAT STUDIES, December 1926, III, 130, Appendix Table IX, for provisional estimates by classes.

[3] According to reports of the Canadian Pacific Railway.

[4] The method of computation encourages a higher faith in the estimate than was justified by the methods employed previously.

[5] We believe the official estimate of 411 million bushels for 1925 understates that crop by some 27 million bushels. See WHEAT STUDIES, December 1926, III, 80, 137.

inspected up to the end of November in the Western Division, only 48.1 per cent have this year graded No. 3 Northern or better, as against 72.8 per cent for the same period of 1925. Much of the grain is tough. Unofficial observers, however, have affirmed that the quality has turned out much better than might have been expected, and European millers have commented favorably upon the milling quality of the tough grades.

Europe and North Africa

Wheat cutting throughout Europe and North Africa was largely completed by the first week in September, except in the extreme northerly regions. Harvest weather, though not free from rain in most countries, was generally such as to encourage belief that crop estimates current early in August would be maintained. Nevertheless threshing returns in several countries somewhat disappointed earlier expectations as to both quantity and quality; and revised estimates may show slight reductions in several current estimates. With respect to quality, the European and North African crops of 1926 are inferior to those of 1925.

Estimates of North African crops remain unchanged since August 1 except for Algeria, where threshing returns showed disappointing yields of wheats other than durum, and estimates were reduced from 29.8 to 23.5 million bushels. The North African crop as a whole, including Egypt, is estimated at 90 million bushels, about equal to the 1920–25 average, but considerably below the 105 million bushel crop of 1925.

Among the important wheat-producers of Western Europe, France has furnished the greatest disappointment. The growing season was unfavorable, and though harvest weather was excellent, threshing returns fell below expectations. During late August and September the trade forecasts of outturn ranged between 239 and 259 million bushels, in contrast with earlier estimates of 280–295 million. The first official estimate of 249 million bushels appeared on October 8, and is considered above rather than below the truth. On this basis the crop is the smallest since 1922—82 million bushels below that of 1925, 33 million below the 1920–25 average. It is reported to be generally of fair quality, though not high in weight per bushel; in quality it compares favorably with the large crop of 1925, which contained much wheat unfit for milling or seed.

In Germany, though wet weather hampered harvest operations, the crop is about of average size but rather smaller than the large crop of 1925. The official estimate as of September 1 was 112 million bushels. Later incomplete estimates[1] indicated only about 100 million bushels. The wheat is light in weight and some of it otherwise of poor quality, but German millers find the millable wheat unusually high in gluten.

Following reports of threshing returns, the crop estimate for England and Wales was lowered from 52.5 to 49.5 million bushels, and that for Italy was raised from 205 to 220 million bushels. Present figures are lower than those of 1925 for both countries, below average for Great Britain but above for Italy. No change has occurred in estimates of the Spanish crop, though rain during the harvest period is said to have lowered the quality. Most of the smaller producers of Western Europe harvested crops smaller than those of 1925, and in Holland, Belgium, and Portugal, crops were below the 1920–25 average. Quality is not altogether satisfactory. In Belgium, Holland, Denmark, and Great Britain, the grain is of light weight and poor color. In the southern regions of Italy quality is poor, but elsewhere fully average.

In Eastern Europe exclusive of Russia, 1926 crops in all countries exceed the 1920–25 average, and fall but little short of the excellent outturns of 1925. Between August and November, official estimates of production were raised slightly for Hungary, Roumania, and Austria, while those for Poland and Finland were lowered slightly. The 1926 crop of countries of the lower Danube basin (Hungary, Jugo-Slavia, Bulgaria, and Roumania) totals 299 million bushels, as against 305 in 1925 and a 1920–25 average of 210. Quality is reported as

[1] See *Foreign Crops and Markets*, November 22, 1926, XIII, 685. The official estimate applied to four states producing 85 per cent of the German crop, and indicated a production in those areas of 16.7 per cent below the crop of 1925.

poor on account of light weight in Roumania and most of Jugo-Slavia and Hungary, but good in Bulgaria. In the more northerly countries of Eastern Europe, production for 1926 compares less favorably with that of 1925. Latest estimates of outturn for Czecho-Slovakia, Poland, and Austria indicate a crop of 96 million bushels as compared with 108 million bushels harvested in 1925 and an average of 83 million bushels for 1920–25. In these countries also the grain is reported light in weight.

This year Russian officials have not yet ventured quantitative estimates of production. But observers in Russia and abroad expected around August 1 an output exceeding the 577 million bushel crop of 1925.[1] Expectations became less optimistic as the harvest, begun in the south in mid-July, progressed under variable weather. Heavy rains during late August and most of September delayed both the ripening and the harvesting of the important spring-wheat crops in the central and northern regions. Broomhall reduced his estimate from 664 to 600 million bushels on September 21. Present information suggests a Russian crop about as large as that of 1925, but of better quality at least in the important exporting regions of Southern Russia, and larger than in any other post-war year. So large a crop has more significance for the international market this year because the carryover was of fair size, whereas a considerable part of the 1925 crop was required to replenish depleted stocks.

Wheat Substitutes in Europe

Since in Europe rye and potatoes are in some measure substitutable for wheat, while the volume of production of other cereal crops to some extent determines the feeding of wheat to animals, the summary figures shown in Table 2 are significant. The European rye crop is much smaller this year than last, though larger than in any other post-war year except 1923, and above the 1920–25 average. The potato crop of 1926, though by no means a failure, is the smallest since 1921. Crops of corn, barley, and oats are larger than in any other post-war year, and equal or exceed averages for the five years before the war.

Table 2.—Production of Cereals and Potatoes in Europe (ex-Russia), 1920–26*

(Million bushels)

Year	Wheat	Rye	Potatoes	Corn	Barley	Oats
1920.....	936	512	3,351	455	511	1,311
1921.....	1,201	739	3,078	337	526	1,354
1922.....	1,031	692	4,803	364	558	1,376
1923.....	1,248	803	3,864	416	624	1,652
1924.....	1,049	633	4,196	523	531	1,466
1925.....	1,386	918	4,743	568	645	1,620
1926.....	1,236	762	3,839	613	656	1,800
Average 1909–13.....	1,338	947	4,158	508	660	1,757
1920–25.....	1,142	716	4,006	444	566	1,463

* Official estimates, here chiefly as compiled by the U.S. Department of Agriculture, representing production in 24 countries for wheat, 21 for rye, 27 for potatoes, 7 for corn, and 24 for barley and oats. The figures are not complete, but cover the great bulk of the European production.

In short, European crops of bread grains and potatoes are smaller than last year, about the same as in 1923, while crops of feed grains are unusually large. Prices of rye and potatoes will certainly be above the exceptionally low levels of last year, thus tending to reduce the substitution of these for wheat as foods, and making for appreciably larger import demand for wheat. On the other hand, the tendency to use millable wheat for animal feed will probably be considerably smaller than last year.

Southern Hemisphere Wheat Crops

Crops in the Southern Hemisphere are always watched with special interest after the middle of October. This year the markets have been particularly alert for news from Argentina, in the light of last year's unexpected reversal in crop prospects, which precipitated a sharp rise in wheat prices after mid-November, 1925. By the end of November this year, an excellent crop was assured in Australia, where damage during the harvesting season is not common, and nearly assured in Argentina.

[1] Authorities disagree as to the size of Russia's wheat crop of 1925. The U.S. Department of Agriculture continues to use the estimate of 661 million bushels, reported in the autumn of 1925. Soviet authorities later admitted that this was too high, and we have accepted the figure given by the International Institute of Agriculture as nearer to the truth.

But in the latter country unfavorably wet weather might damage quality, and to some extent reduce quantity, after December 1.

Australian crop news was distinctly favorable during the whole growing season. Conditions were favorable for seeding, germination, and growth from April to July; and during August nothing more damaging was reported than unusual growth of weeds as a result of plentiful rainfall. Good rains fell whenever needed through September and October, distinct shortage of moisture being reported only from one unimportant region in southern Queensland. Prospects were reported most favorable in West Australia and Victoria; least so in New South Wales, where more rain would have been welcomed. Harvesting began in some districts under favorable conditions in late October and early November, two or three weeks early. The Australian acreage, presumed in August to be about the same as the 10.3 million acres of 1925, was officially estimated at 11 million acres in October. Unofficial forecasts of production issued prior to November 1 ranged from 135 to 165 million bushels, the majority of observers predicting an outturn of 140 million bushels, with record crops in West Australia and Victoria. During November developments were generally favorable, though late-sown wheat is reported to have ripened prematurely in New South Wales. Preliminary forecasts of production for the various states totaled 154 million bushels in late November. Reports during the month consistently mentioned excellent quality.

The progress of the Argentine crop has occasioned almost continuous uneasiness. Wet weather and unusually high temperatures prevailed during June, July, and August, precipitation being about 75 per cent above normal. The seed germinated rapidly, and warm weather advanced the growth of the stalk at the expense of root growth. Observers agreed in regarding the plant as healthy, but unduly susceptible to adverse weather conditions. During the last week in August, all of September, and the first week of October, rainfall was scanty and temperatures more nearly normal, though somewhat unseasonably warm. Rumors of damage from drought were current. But heavy and beneficial rains fell in the second week of October, to be followed by a brief spell of clear, cold weather. Frost was reported in the southern and extreme northern parts of the wheat belt around mid-October, causing some damage in the south. A period of more seasonable weather in the latter part of October was followed by heavy rains in the first week of November. Frost did some damage in the southern regions on the eighth.

Harvest began in the north around November 10, at least two or three weeks earlier than usual on account of the unusually mild weather. American observers reporting on developments during the critical period of growth confirmed reports of some frost damage and predicted poor yields from the southern area of La Pampa and the extreme westerly regions. But developments were fairly favorable in most important producing districts; exceptionally heavy precipitation during the last two weeks of the month benefited late-sown crops but hampered the harvesting of matured grain. Unofficial forecasts of production, which earlier ranged between 210 and 230 million bushels, were maintained throughout November. The first official forecast, issued December 11, is for a crop of 215 million bushels, 24 million larger than either of the two preceding crops and substantially exceeded only by the 247 million bushel crop of 1923–24. Trade opinion commonly regards this forecast as unduly conservative. Reports on early marketings indicated excellent quality, in marked contrast to last year's. There is still time, however, for significant alterations in recent views as to the size and quality of the crop.

The combined output of the two great producing countries of the Southern Hemisphere now appears to be one of the largest in history, equalling or exceeding the previous record of 372 million bushels in 1923–24, and exceeding the outturn of 1925 by over 60 million bushels. Since the Argentine wheat is of far better quality than last year, less will be used domestically, and most of the heavy carryover of old-crop wheat may be exportable after mixing with new-crop grain.

II. RATE OF MARKETING AND ACCUMULATION OF STOCKS

The rate of movement from the farms varies greatly in different years and in different countries. It is easy to compare one year with another, but difficult to secure significant figures for comparison or generalizations. This year, broadly speaking, farmers have shipped their wheat promptly in North America but slowly in most European countries. Early heavy marketing of American winter wheat coupled with restricted marketings of native wheats in Europe made for heavy international shipments in July–August. Subsequently, price movements resulting from the advance in ocean freight rates and other causes operated to induce heavier marketings in several European exporting and importing countries, and to cause reductions in export sales in North America. Stocks afloat remained small but Canadian visibles rose sharply, while in the United States dissatisfaction with current prices caused a slackening of the movement from the farms.

European Marketing

Owing generally to delayed harvests, and in France and Germany for special reasons, the marketing of domestic wheats in most European countries began somewhat later than usual, and proceeded at a moderate rate until the early autumn. The movement was accelerated in October–November, when import prices advanced as a result of the rise in ocean freights and domestic prices rose to a level higher than they seemed likely to maintain after import wheat should become more freely offered.

For Great Britain, the country most affected by these considerations, statistical evidence is afforded by cumulative totals of farmers' deliveries of new wheat, as of about the end of each month for recent years, in thousand bushels as follows:[1]

To end of	1924	1925	1926
August	277	1,266	235
September	1,491	4,140	2,739
October	3,882	6,675	5,753
November	4,737	9,552	9,545

Although the movement was slower in the early weeks of this crop year, it gathered such momentum that before the end of November total new-crop deliveries had about equalled those of the corresponding period in 1925, although the 1926 crop was the smaller of the two. For other European countries one must rely largely upon non-statistical information.

In Germany the rate of marketing was unusually rapid in 1925, as a result of the large crop and acute financial necessities of the farmers. This year, with a smaller crop, wet weather during the threshing season, the absence of special pressure upon the farmers to liquidate their crops, and substantial credits to finance holding, the rate of marketing was not rapid but not, on the other hand, exceptionally retarded. The movement was perhaps most rapid in East Prussia, where the quality was especially poor. Owing to the presence of considerable stocks of wheat imported in anticipation of tariff increases, millers found the domestic deliveries largely sufficient for current needs, and some domestic wheat has been exported under the import certificate system adopted last year.

In France, marketing was materially retarded. The Producers' Association has continued to urge growers to follow a policy of fairly uniform monthly marketings. Growers held out for higher prices in view of the short crop,[2] but the appreciation of the franc since August 1 has made for a decline in the general price level and by reducing import prices in francs has tended to restrain the natural advance in prices of domestic wheats. It is asserted that farmers were encouraged to hold on to their wheat because a prolonged drought, unbroken until early in November, threatened seriously to curtail sowings for the 1927 crop. The government, anxious to keep down the price of bread, allowed the virtual suspension of the duty to lapse on August

[1] As reported in Broomhall's *Corn Trade News*.

[2] In 1925–26 those who marketed early received a much lower price in francs than those who held their grain, chiefly because prices advanced as the franc depreciated. Growers generally remembered this experience, but few understood its real cause. In view of the different course of the franc this year, slower marketing may well prove costly.

20, criticized the growers for not marketing more freely, and eventually authorized a partial refund of the duty on wheat imported after October 18.[1] The radical advance in freight rates, however, tended for a time to maintain import prices. Subsequently as freight rates dropped and the franc advanced further, import prices in francs declined; under these circumstances, with seeding for the next crop in full swing, producers apparently lost hope of materially improved domestic prices and began to market much more freely.

In Hungary the wheat was apparently marketed with fair rapidity, chiefly under the stimulus of higher export prices caused by importers' demands for supplies near at hand. In Roumania and Jugo-Slavia, on the other hand, farmers were reluctant to sell at the low prices offered in view of the large crop and the light export demand for wheat of inferior quality. Shortage of railway cars and the harvest of a bumper crop of corn were additional factors restricting marketings in Roumania. But the paucity of information regarding this region leaves the course of developments there somewhat obscure.

The collecting campaign in Russia was more successful this year than last, for both wheat and other grains. During the early part of the season, collections of all grains were below those of last year, but by the end of September the cumulative totals were quite as large. Wheat collections formed an unusually large proportion of the total, and were 61 per cent above those of last year for the period July-September, largely because the prices paid for wheat have this year compared much more favorably with prices paid for barley. Collections continued good during October and November. By the first of November 87.3 million bushels of wheat were collected as compared with 51.8 million bushels in 1925, and this year much heavier collections were made in November than were made a year ago.

[1] Of 8 francs out of 18.2. On November 2 an advance of 4 francs was decreed to take effect January 1, and a complete restoration of the duty is probable later.

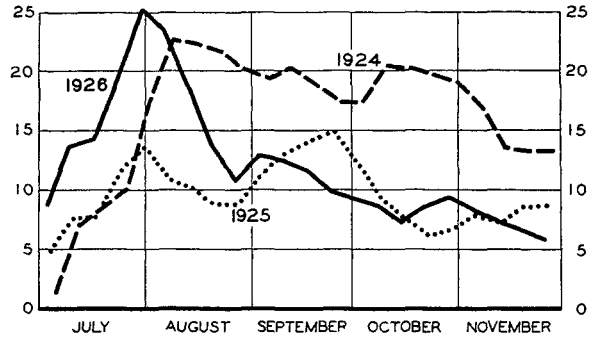
[2] The list of primary markets for which receipts are recorded does not include Pacific Coast centers. The picture is further somewhat deficient because receipts at gulf ports also are not recorded.

North American Marketing

American winter wheat was marketed in exceptionally large volume in July and early August. The early movement was due chiefly to harvesting weather exceptionally favorable for the use of "combines," though in part to the large size of the crop of hard red winter wheat and to the disposition of American producers to sell freely. The course of marketing in the United States east of the Rocky Mountains,[2] as evidenced by weekly wheat receipts at primary markets, is shown in Chart 1 with

Chart 1.—Weekly Wheat Receipts in Primary Markets in the United States, July–November 1924–26*

(Million bushels)



* Unofficial data compiled from *Price Current-Grain Reporter.*

comparisons for two preceding years. Marketings after the first of September were curiously small in view of the size of the crop, falling far below those of 1924, when the crop east of the Rocky Mountains was larger in size, and slightly below even those of 1925, when the crop was very much smaller. In part slow marketing from September onwards this year has been due to the short crop of hard spring wheat, which usually maintains the flow of wheat to market during September. But farmers this year have been disposed to hold rather than sell, particularly after the rise in prices beginning in early September; and their more favorable financial position has enabled them to do so.

This year 263 million bushels of wheat reached primary markets in July-November, as against 213 million in 1925, 359 million in 1924, and 222 million in 1923. Expressed in terms of percentages of total

crops excluding Pacific white wheats, 35 per cent was marketed by the end of November, as against 36 per cent in 1925, 44 per cent in 1924, and 32 per cent in 1923. The marketing movement this year has thus far been fairly rapid (though much less so than in 1924), but unusually concentrated in the early weeks of the crop year. A notable peculiarity in the direction of wheat movement this year was the heavy shipment of Kansas wheat to Minneapolis. Millers were unusually ready to purchase hard winter-wheat because of its excellent quality and high protein content, a slightly reduced freight rate, and the impending short crop of hard red spring.

The movement of wheat in the Pacific Northwest contributed also to relieve early-season stringency. Farmers sold with unusual freedom up to the second week of September. By September 18, the number of cars of wheat received at the leading terminal markets during the new-crop season had reached 16,972, as against 8,505 in 1925,[1] when the crop was only 10 million bushels smaller but marketing was exceptionally restrained. In part the large receipts this year were due to a flow of wheat from Idaho until mid-September; in 1925 the crop of this region was diverted to eastern points as a result of the short crop of soft red winter wheat. After the middle of September marketings were irregular but generally slow.

Canadian receipts, both at country elevators and at the head of the lakes, attained large volume from one to two weeks later this year than last. Receipts at country elevators were this year only about 17 million bushels during the first three weeks in September, as against 47 million bushels for the same period in 1925. After the last week of September the movement became heavier than last year. Much the same story is told by receipts at Fort William and Port Arthur.[2] A total of 157 million bushels was received at country elevators during October and November as against 141 million last year; and 117 million bushels were received at Fort William and Port Arthur as against 105 million in 1925. For the September–November marketing season as a whole, wheat left the farms more rapidly though somewhat later in 1926 than in 1925, despite the larger crop last year and unfavorable weather in both years.

The combined effect of heavy marketing by farmers—in part the result of requests by the Pool for members to send forward their damp grain as rapidly as possible—and of shortage of tonnage for export movement, has been an unusually heavy accumulation of stocks in various positions. This is shown in Table 3, with comparisons for earlier years. Total stocks at the end of November were nearly 12 per cent larger this year than last, despite the smaller crop. Stocks in all positions except in country elevators and public elevators in the East were much larger than in any of the past three years. The heavy accumulations at American lake and Atlantic seaboard ports and at Fort William and Port Arthur were particularly noteworthy. In view of the unusual pressure for storage space a change was instituted in the enforcement of the Canadian navigation laws, whereby American vessels were permitted both to load and to discharge Canadian wheat at Canadian ports, thus expanding facilities for winter storage.

TABLE 3.—CANADIAN GRAIN IN STORE LATE IN NOVEMBER, 1923–26*

(Million bushels)

Last week in November	Total	Country elevators West. Div.	Interior elevators	Vancouver elevators	Fort William, Port Arthur	U.S. lake and Atlantic ports	Public elevators in the East
1923....	101.6	52.7	.5[a]	.8	19.8	16.3	11.5
1924....	73.7	24.3	2.5[a]	1.3	25.6	9.8	10.2
1925....	102.6	45.3	5.1	4.7	19.9	10.7	16.9
1926....	114.7	35.1	6.9	6.7	29.8	21.7	14.5

* Compiled from *Canadian Grain Statistics*, and adjusted to bring figures for country elevators in Western Division into the proper week.

[a] Figures prior to 1925 are less comprehensive than for later years.

VISIBLE SUPPLIES

The weekly course of the principal elements in visible supplies is shown in

[1] Data from *Commercial Review*, Portland, September 21, 1926. The markets were Seattle, Portland, Astoria, and Tacoma.

[2] See Appendix Tables I and II.

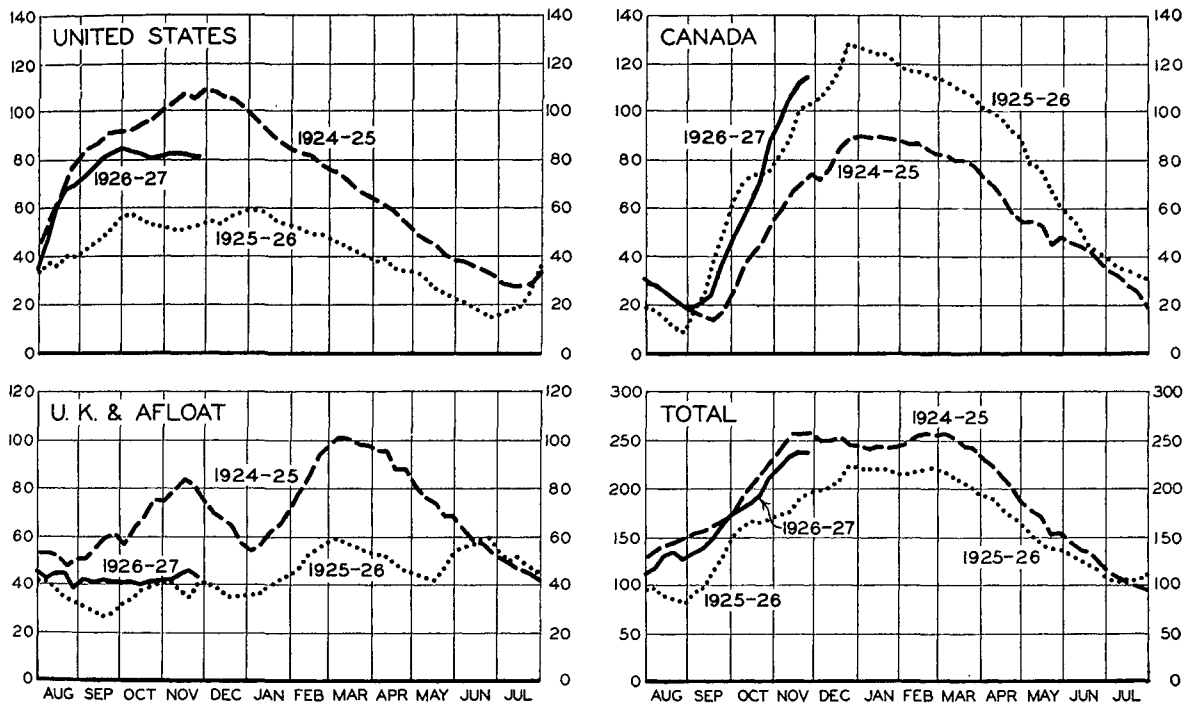
Chart 2, with comparisons for the two preceding years. The general volume of visible supplies in different years in the United States and Canada depends chiefly upon the size of crops, but in part upon the rate of marketing, absorption by domestic mills, and export movement. The United States visible (Bradstreet's)[1] is notable for two features: the low point this year was reached nearly a month earlier than usual, on account of the unusually early and rapid marketing of hard winter wheats; and volume ceased to increase in October, chiefly because rainy weather delayed threshing of soft red winter and hard red spring wheats, but partly because farmers were dissatisfied with prevailing prices.

Canadian visibles reached their low point somewhat later than in 1925, but earlier than in 1924, in general reflecting weather conditions affecting threshing. The accumulation of supplies was not particularly delayed in either year, despite pessimistic news current during the threshing seasons. The increase of 1926 visibles over 1925, after the middle of October, is notable. Throughout November 1926, Canadian visible supplies ranged more than 15 million bushels higher than in November 1925, even in the face of a smaller crop and larger European requirements. In part this was due to relatively more favorable weather during October and November in 1926 than in 1925; but the major factors have been continued heavy movement from farms, and the limitations upon exports imposed by the shortage of tonnage.

The effect of the coal strike and the attendant advance in ocean freights is more clearly apparent in visibles afloat and in ports of the United Kingdom. In view of the moderate European carryovers on August 1, 1926, the large exports of American wheat, and poorer crops, delayed harvests, and retarded marketings in Europe, these

CHART 2.—VISIBLE WHEAT SUPPLIES IN THE UNITED STATES, CANADA, UNITED KINGDOM, AND AFLOAT, WEEKLY FROM AUGUST 1924*

(Million bushels)



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

[1] The better official figures now compiled do not yet provide comparable data for several years.

visible supplies might have been expected this year to range considerably higher than last year. As a matter of fact, they have been little higher than in 1925, and much lower than in 1924.

Total visibles for the August–November period of 1926 ran below those of 1924, and above those of 1925, as was natural in view of the size and distribution of crops. But marked changes have taken place in the component elements. In 1924 visibles afloat and in the United States were high, in Canada low. In 1925 visibles afloat and in the United States were low, in Canada high. But in 1926 both American and Canadian visibles are high, and it is the visible afloat which is low. In short, wheat in the hands of European importers is abnormally small in amount in view of the circumstances; that in the hands of exporting countries, particularly Canada, is unseasonably large. For these developments the shortage of tonnage and exceedingly high ocean freight rates have been chiefly responsible.

The accumulation of stocks is reported to extend to other exporting countries for which pertinent statistics are not available. In Russia ocean freight space has not been sufficient to move out stocks of wheat collected for export. The Argentine exportable surplus of old-crop wheat on January 1 promises to be unusually large, though of very inferior quality. Early maturity of new Argentine and Australian crops gives promise of supplies of new wheat available earlier than usual. By the middle of November it was apparent that ample stocks for filling European requirements were to be had in exporting countries, and importers were justified in their policy of hand-to-mouth buying in the hope that settlement of the coal strike would lower freight rates and render these stocks freely available at attractive prices.

III. THE ADVANCE IN OCEAN FREIGHT RATES

The spectacular rise in ocean freight rates was the most noteworthy feature of the period under review. The primary cause was the British coal strike inaugurated on May 1, which was practically over by the first of December. The shut-down caused an almost complete suspension of British exports and bunker shipments of coal and led to heavy imports of coal into Great Britain. It necessitated extensive reallocations of ocean tonnage, increased shipping costs and delays, and introduced fresh and unusual disturbances into the whole business of chartering. In consequence, ocean freight rates during the late spring and summer were somewhat increased, and a striking advance took place in September–November. This development had profound effects on wheat prices, the distribution of wheat stocks, and the volume and course of international trade.

The Course of Freight Rates

Chart 3 presents a picture of the course of ocean freight rates on wheat from three important exporting centers to the United Kingdom during the past three years. As the chart suggests, ocean freight rates are subject to erratic and wide fluctuations, due to various causes including variations in the pressure to move wheat or other commodities.[1] Here we are concerned chiefly with the movement of rates in 1926, since the beginning of the strike in May. Appendix Table V gives weekly rates on ten leading wheat shipment routes since last May, as compiled by the International Institute of Agriculture.

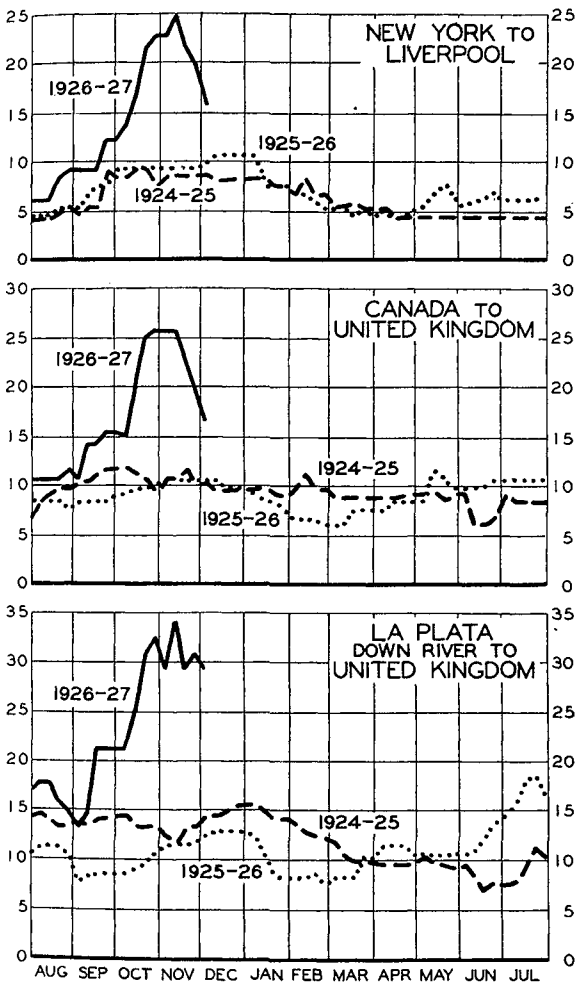
Rates from New York to Liverpool and from Canada to the United Kingdom rose abruptly on news of the coal strike, but subsided early in June, though not to so low a level as had previously prevailed. The abrupt rise was due chiefly to delays in

[1] Quotations of ocean freight rates usually apply to "heavy grain," not wheat alone, and hence are subject to other influences than the movement of wheat. Quotations of rates are somewhat indefinite in meaning because they apply to charter fixations made perhaps for immediate, perhaps for more distant, shipment. Wheat is transported both in parcels by liners and in cargoes by tramp steamers, and the two sorts of rates do not fluctuate precisely with one another. Further difficulties in the interpretation of statistics on ocean freight rates arise on account of the diversity of seasonal movement in different years and between different routes.

British ports, higher bunkering costs, and anticipations of increased demand for tonnage on the North Atlantic–United Kingdom routes, rather than to immediate pressure

CHART 3.—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.

for actual shipment of coal. Because of small demand for Argentine wheat, La Plata–United Kingdom rates did not follow the mid-May rise of North American rates. The sharp June–July rise of Argentine rates was due in part to maize shipments, though perhaps also in part to a shortage of tonnage caused by a transfer of vessels from Argentine routes to coal transport from North America. In general, the early effect of the British coal strike was to cause alterations in the allocation of vessels to different routes and to maintain the level of May–August rates on all routes above what might have been expected from seasonal factors and other special causes.

On the New York–Liverpool and Canada–United Kingdom routes, rates commonly tend to advance in August and September. This year the rise on the New York–Liverpool route was sharper and earlier than usual, in part as a result of the early movement of American winter-wheat crops; but the rise was probably intensified by increasing pressure for tonnage to transport coal. A similar shortage of tonnage combined with a heavy movement of early-harvested American wheat caused a sharp advance in charter rates from gulf ports in July; and Montreal port authorities found it necessary to embargo receipts of American grain for a brief period because of congestion due to shortage of tonnage. These pre-September movements, while by no means insignificant, were moderate in comparison with the subsequent advance.

The distinctly unusual rise in rates began on various routes at different times in September, and reached a peak before the middle of November. Interruptions occurred in late September and early October. Table 4 gives evidence of the unusual extent of the advance in rates on five important wheat routes, as well as a notion of the ordinary relationships between rates on different routes as governed chiefly by distance from importing markets. The proportionate rise was greatest in rates from North American ports, which normally are lowest. On these routes the maximum range of 4.5 cents per bushel between lowest and highest rates during the August–November periods of 1924 and 1925 became 18.1 cents in 1926. The range on the Argentine–United Kingdom route, previously greatest at 3.9 cents, became 20.8 cents; the highest previous range on the Northern Pacific route, 4.8 cents, became 11.3 cents. The Australian range showed little change. Rates from the Black Sea and Danube advanced in rough

correspondence with those on overseas routes. Strong competition developed between Russian and Roumanian exporters, and the advantage appears to have lain with Russia because of the better wheat there obtainable.

TABLE 4.—EXTREME RANGES IN WEEKLY FREIGHT RATES ON GRAIN FROM VARIOUS EXPORTING CENTERS TO THE UNITED KINGDOM, AUGUST–NOVEMBER, 1924–26*

(Cents per bushel)

4-month period	New York to Liverpool	Canada to U.K.	North Pacific to U.K.	La Plata (down river) to U.K.	Australia to U.K.
1924....	4.1- 9.1	6.9-11.9	18.2-23.0	11.8-14.6	19.2-29.2
1925....	4.6- 9.1	7.6-10.6	19.8-22.7	7.8-11.7	19.5-26.6
1926....	6.1-24.2	10.6-25.8	19.5-30.8	13.3-34.1	24.4-34.1

* Data compiled from *International Crop Report and Agricultural Statistics*, converted from shillings and pence at current rates of exchange.

The chief cause of the precipitous rise in rates in September was a rush for tonnage to transport coal from the United States to Great Britain in anticipation of winter requirements. Chartering of vessels for transport of coal had been heavy in previous months, but was fully 50 per cent heavier still in September. Thus the number of vessels chartered for this service was 221 during June, 264 during July, 265 during August; but 390 in the first three weeks in September.[1] Competition for tonnage rapidly pushed rates to the highest level in five years. Shipowners, in a good bargaining position for the first time in years, contributed to the extent of the rise by shifting vessels from one port to another or holding vessels idle rather than accept lower rates, thus placing shippers with uncovered contracts in a very difficult position. In other words, the extreme advance in rates was in part the result of a "squeeze."

A sharp decline began in the second week of November,[2] coincident with a general decline in wheat prices. Although negotiations for settlement of the British coal strike failed of consummation, the filtration of miners back to work presaged resumption of normal employment for tramp steamers, and rates could not be maintained. Further declines are to be anticipated, but in view of the need for replenishing coal stocks in most importing countries, the return to normal freight conditions can hardly be accomplished for several months.

[1] See Friday issues of the *London Grain, Seed and Oil Reporter* for August–November, quotations from *Daily Freight Register*.

[2] On the more important routes.

CONSEQUENCES OF THE ADVANCE

A significant consequence of advancing rates was the tendency of European importers to seek with unusual assiduity supplies in near-at-hand sources, on account of the relatively small increase in costs per bushel which must be met in c.i.f. prices for European wheat as compared with American and Canadian, and for Canadian and American as compared with Argentine and Australian. The volume of overseas shipments was reduced, but their direction was probably little affected by this tendency during the past three months, partly because advances in rates occurred on all routes, but more largely because little Argentine and Australian wheat was available.

In subsequent months, if rates remain proportionately higher on Southern Hemisphere than on Northern Hemisphere routes (as is possible since prompt redistribution of tonnage to normal employment is not possible), Canadians and Americans may reap some advantage from the high rates. But under present circumstances the possibility is not great. With large surpluses in three of the four major exporting countries, European importers are unlikely to continue to bear the burden of increased transport costs to the extent to which they have probably done in recent months. The exporting country most desirous of disposing of its surplus will have to accept what importers are willing to pay, less transportation costs. Fundamentally, prices depend upon the statistical position of demand and supply, and this position has become more clearly favorable to importers since early November. Although the incidence of increased transport costs is probably never borne entirely by either party, present circumstances indicate that importers will henceforth during this season be in a po-

sition to refuse to bear by far the larger proportion. If so, f.o.b. prices in all exporting countries will run lower than if rates were no higher than usual. In so far as near-at-hand exporting countries can hope to gain an advantage, it is an advantage of a negative sort: they will obtain relatively higher prices only in the sense that distant countries obtain prices relatively lower.[1]

The advance in freight rates has created serious difficulties for the Canadian Wheat Pool. It possesses enormous wheat stocks, accumulated partly through its own advice that members should ship early. It is naturally anxious to sell at the best possible price and as early as possible in order to avoid heavy carrying charges. It has been contrary to its policy to hedge against receipts, and it could have done so only at the risk of depressing prices, perhaps to such an extent as to affect the incidence of the advance in freights. Increasing evidence during November that Southern Hemisphere crops would be large and early made rapid sales at prevailing prices appear the desirable policy. But at times tonnage was not available, and the rise in freight rates curtailed importers' demands —thus creating the necessity of securing and paying for more storage space. The uncertain freight situation introduced special risks into the Pool's practice of making forward sales to European millers in excess of engagements for cargo space. At present it appears that these developments will be costly for the Pool.

Other consequences of freight rate movements are considered incidentally in subsequent sections of this survey.

Incidence of Increased Transport Costs

The difficult question of the incidence of suddenly increased costs of transportation merits brief consideration. Theoretical reasoning goes only so far as to say that the burden will be borne by purchasers if the intensity of demand remains unchanged, by sellers if this demand is greatly curtailed, but ordinarily by both, since ordinarily the conditions of both demand and supply will be altered. Statistical examinations involve the problem of ascertaining "normal" courses of prices and normal price-relationships, in order to obtain a datum line from which to measure deviations due to increased transportation costs; and such a datum line is difficult, if not impossible, to secure.

Various opinions have been expressed regarding the incidence of the recent advance in rates: European authorities have generally held that the additional costs have fallen upon importers, while authorities in exporting countries have argued that exporters have paid; but none of these opinions has been supported by detailed evidence or reasoning.[2]

Adequate discussion of the incidence of increased transportation costs clearly cannot be conducted on the basis of Liverpool-Chicago price spreads; and Winnipeg-Liverpool spreads show merely that since the middle of October the spread has been somewhat larger than usual.[3] The magnitude of the spread has no bearing upon the incidence of the increased cost of transportation. A more proper approach to the problem is to consider, in the light of the statistical position in recent weeks, whether or not prices in Liverpool might have been expected to move at variance with the course actually taken. (See Chart 7, p. 161.)

The relationship of near and distant futures in Liverpool differs with prospects for obtaining supplies. If the international wheat position is generally tight or generally easy, near deliveries will be at a small premium over distant. If the position is currently tight but expected to become easier, near positions will be at a larger premium over distant. If the cur-

[1] During November a dispute arose regarding the authorization of agents to handle chartering of vessels for Australian voyages, with the result that chartering was at a standstill for some weeks. This may result in some reduction of Australian wheat shipments in the spring; but in view of the tonnage chartered before the dispute arose, Australian supplies promise to be readily available during the near future.

[2] The United States Department of Agriculture has recently stated that since prices of the December future in Liverpool were about the same in mid-November this year and last, "the effect of the higher rates is therefore evident in the lower prices in surplus-producing countries." *Foreign Crops and Markets*, November 22, 1926, XIII, 686. Lower prices this year as compared with last did indeed prevail in Chicago; but this was due to the fact that the United States was on a domestic basis in 1925. Winnipeg prices since early September have been higher in 1926 than in 1925.

[3] For data, see table in *ibid.*, p. 699.

rent position is easy and tightness is expected to develop, the distant future will run very close to or even be at a premium over the near.

This year, throughout the first half of September, October and December futures bore a small premium over the May, reflecting a fairly satisfactory current position coupled with expectations of good deliveries from Canada and the Southern Hemisphere throughout the fall and winter. During late September and early October, the spread between October and December futures and the May gradually widened, reflecting in part the delay to Canadian threshing, but in part the expectation of cheaper wheat in the spring, when the level of freight rates might be expected to be lower. Throughout October the spread between the December and the May futures widened rapidly. During the whole period, the May future rose and fell in Liverpool in much the same way as in other markets and in accord with general crop prospects, particularly in Canada and the Southern Hemisphere. The increasing spread between the December and the May futures can be accounted for only by the advance in ocean freight rates coupled with the expectation of a decline; for wheat from the United States and Canada for December delivery was not lacking from other causes. If Liverpool c.i.f. prices coincide closely with the prices of the near futures in Liverpool, and such is roughly the relation, then it appears that the advance in freight rates was largely at the expense of importers.

This conclusion is strengthened by other facts. Import stocks in Europe were generally low and deliveries of domestic wheat were slow, so that importers were compelled to purchase rather freely in spite of advancing c.i.f. prices. Exporters undertook very little shipment on consignment in view of the unusual risk. On the whole, more forms of economic pressure were exerted to maintain European demand and raise c.i.f. prices than were exerted to swell supplies in exporting countries and thus lower exporters' bids to producers.

It is impossible, however, to conclude that the whole of the increased cost of transportation fell upon importers. There were days and weeks throughout the period when importers bought sparingly and exporters offered freely; other days and weeks when the opposite occurred. Under such circumstances increased transportation costs could only be shared in an indeterminate proportion. But that importers bore the larger proportion at least until early November seems fairly clear. After early November, when European domestic deliveries became freer, large stocks had accumulated in North America, good prospects in the Southern Hemisphere were more nearly confirmed, and either direct settlement of the strike or slow filtration of British miners back to work augured declining freight rates, European buyers were more than ever confirmed in their policy of restricted purchasing; and the possibility of deducting increased transportation costs from prices in exporting countries became more definite.

IV. INTERNATIONAL TRADE, AUGUST–NOVEMBER

Volume and Course of Trade

The volume of international trade in wheat and flour during the first third of the crop year was fairly heavy. Total shipments for the first 17 weeks, according to Broomhall's data summarized in Table 5, were somewhat larger than in this period of most years before and since the war, and about halfway between the high figures of 1924 and the low figures of 1925. There is reason to believe that in fact the international movement in August–November this year was almost as large as in these months of 1924, for Broomhall's data understate Russian and Danubian exports,[1] and these were light in 1924. The reported shipments this year equal 33 per cent of Broomhall's estimated total for the crop year 1926–27, which we believe considerably too low.[2] Unfortunately, comprehensive official statistics of exports and imports are not yet

[1] See below, pp. 158–59. [2] See below, pp. 166–67.

available. These may alter the picture shown by Broomhall's data, which largely omit rail shipments within Europe and are not complete in other respects. We believe that deficiencies in these data were more important than usual this year, but that even when corrected the August–November totals will appear a moderate fraction of the trade of the year.

TABLE 5.—INTERNATIONAL WHEAT SHIPMENTS (BROOMHALL), AUGUST–NOVEMBER, 1921–26*

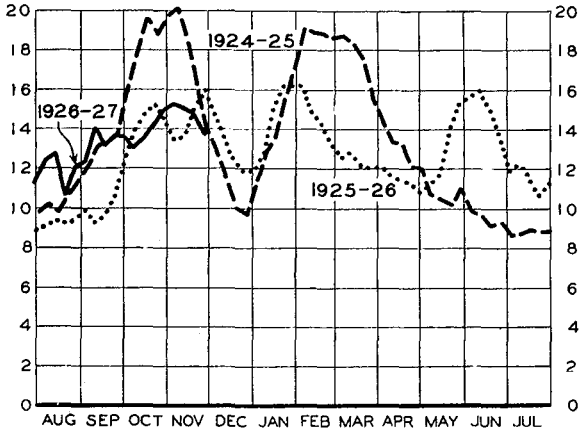
Year	(Million bushels)			(Percentage of crop year totals)		
	Total	To Europe	To ex-Europe	Total	To Europe	To ex-Europe
1921.....	217.4	184.6	32.8	33.6	33.8	32.7
1922.....	218.8	189.2	29.6	32.3	32.3	32.7
1923.....	221.9	177.5	44.4	28.6	28.3	29.9
1924.....	255.0	228.3	26.7	35.7	35.7	35.3
1925.....	207.5	166.7	40.8	31.6	32.3	29.2
1926.....	232.8	196.3	36.5	33.1[a]	34.1[a]	28.5[a]

* Figures for 17 weeks, from *Corn Trade News*.
[a] Percentages of Broomhall's latest estimates for the year.

Significant developments in the course of trade are made apparent in Chart 4, which shows a 3-week moving average of Broomhall's weekly shipments in comparison with similar data for the two preceding years. The August and early September movement was the heaviest in several years, reflecting late European harvests, slow European marketing, low stocks of import wheat, and the ready availability of American winter wheat. With the sharp rise in ocean freight rates beginning in mid-September, however, shipments apparently declined, and during parts of October and November they ran below even the relatively light shipments of 1925. This is noteworthy in view of the availability of large quantities of wheat in North America and materially increased import requirements of Europe for the crop. year. Clearly importers reduced their purchases as freight rates advanced, as millers resorted to domestic wheats in anticipation of lower shipment costs and indeed of lower export prices as Canadian, Australian, and Argentine supplies should become increasingly available. Much heavier shipments during August and September in 1926 than in 1925 not only were to be expected, but actually materialized; but heavy shipments, probable in October and November in view of European needs, did not occur to the extent anticipated.

CHART 4.—INTERNATIONAL SHIPMENTS OF WHEAT AND FLOUR, WEEKLY FROM AUGUST 1924*

(Million bushels; 3-week moving average)



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

British and ex-European importers in particular evidently limited their purchases, especially during October and November. Broomhall's figures, in million bushels, showing the distribution of shipments to Europe between the United Kingdom, the Continent, and orders,[1] are pertinent:

Year Aug.–Nov.	To Europe	To United Kingdom	To Continent	To orders
1921.....	184.6	56.0	97.5	31.1
1922.....	189.2	55.9	112.3	21.0
1923.....	177.5	59.2	97.6	20.7
1924.....	228.3	66.5	114.0	47.8
1925.....	166.7	50.0	94.4	22.3
1926.....	196.3	54.2	117.2	24.9

Shipments to the United Kingdom were very little larger than during the corresponding period of last year, despite very low stocks and a smaller crop of domestic wheat. British purchases were naturally curtailed, principally because of the prospect for lower c.i.f. prices when settlement of the coal strike might be expected to lower freight rates, but also because of increasingly good prospects during November for early substantial shipments of wheat from the Southern Hemisphere at lower

[1] Distributions for 1923 are partially estimated.

f.o.b. prices. Statistics of net imports, so far as available,[1] show that the comparatively low figure of British takings for the period was due to restricted importation in October and probably November also; imports during August and September were of good volume.

Although Broomhall's figure for direct shipments to continental countries is not, as compared with 1924 shipments, so small as the British figure, the tendency for continental importers to restrict purchases during October and November is reported to have been effective in some degree. But importation by certain continental countries was encouraged by influences not active in Great Britain, such as improved exchanges, alterations in tariffs, and exceptionally slow marketing of domestic wheat. It is impossible, so long as statistics of net imports remain unavailable, to adjudge the degree to which continental purchases were restricted; but in general it may be said that British imports have been curtailed more than continental, and both were smaller during the period than appeared probable before the extreme advance in freight rates.

Direct shipments to ex-European destinations in the first seventeen weeks are reported by Broomhall as 37 million bushels, by no means a low figure, but only 28 per cent of his estimate for the crop year. Large stocks in Japan, small supplies of good wheat in the Southern Hemisphere, and prospects of lower prices combined to restrict purchases by several ex-European countries during the period under review.

Sources of Exports

The sources of exports during the past four months were in certain respects distinctly unusual, as appears in Table 6 and Chart 5. These are based chiefly on Broomhall's shipments, which afford the best evidence now available but are by no means complete.[2]

North America, as usual, furnished the great bulk of August–November world's shipments. Net exports from the United States nearly equaled those from Canada, in sharp contrast with last year, when the American crop of winter wheat was short. Most of the American exports consisted of winter wheats, the crops of hard red spring and durum wheats being small; hard winter wheats predominated heavily, but Pacific white and soft red types formed an unusually large proportion especially in the first two months. A good deal of the wheat officially reported as exported from Canada was still in the United States on December 1. Broomhall's shipments from North America are, as usual at this season, less than the combined net exports from the United States and Canada chiefly because of large amounts of Canadian grain shipped through the United States which figure in Broomhall's shipments only when loaded at the seaboard.

Shipments from both Argentina and Australia were by far the smallest in recent years, the two countries furnishing only 13 million bushels as against a 1921–25 average of 36 million bushels. This was due in part to the disadvantage suffered by Southern Hemisphere shippers in high charter rates. But almost all of Australia's limited surplus had been exported before August 1, and importers were loth to purchase Argentine wheat of poor quality when better wheat could be secured in North America at lower transport costs. During August and September, when abnormally warm weather gave rise to fears of the outcome of the new crop, Argentine exporters were disinclined to press their offers.

Russian and Danubian shipments were larger than in the corresponding four months of any post-war year. Broomhall's data seem to show that Russia furnished the larger part of these exports, but his data certainly understate the contribution made by the exporters of the lower Danube basin, of which a larger proportion than usual went by rail instead of water. Official statistics show that Hungary and Jugo-Slavia, in August and September alone, had net exports of nearly 11 million bushels[3]—more than double the shipments Broomhall reports for August–November from the Danube basin. Complete official data are likely to show that net exports by Hungary,

[1] See Appendix Table VI.

[2] Especially for Danubian countries, as shown in subsequent paragraphs.

[3] See Appendix Table VI. Hungarian exports during October bring the figure to nearly 15 million bushels.

Bulgaria, Roumania, and Jugo-Slavia during August–November were at least 20–25 million bushels. Russia's net exports were also probably larger than the shipments shown by Broomhall because of overland shipments to the Baltic States and Germany.

Despite the incompleteness of Broomhall's data and of certain official statistics of net exports during October and November, the evidence suggests that importers tended to prefer purchasing in near-at-hand rather than distant markets after the extreme advance in ocean freight rates, in order to avoid increased transport costs. Hungarian wheat was much sought after by importers of neighboring countries during October.[1] Shipments from Jugo–Slovia and Roumania were sent up the Danube in order to escape high ocean freight rates. Even Broomhall's figures (given in Appendix Table VII), which apparently omit most of the shipments by rail and up the Danube, show considerably increased shipments by Russia, the Danube basin, and miscellaneous countries (mostly in or near Europe) in October and only a moderate slackening in November. The increased proportion of these shipments is reflected in Chart 5 (A), in the wider margin between world shipments and North American shipments after mid-October.

TABLE 6.—INTERNATIONAL SHIPMENTS AND NET EXPORTS OF WHEAT AND FLOUR FROM PRINCIPAL EXPORT AREAS, AUGUST–NOVEMBER, 1921–26*

(Million bushels)

Aug.-Nov.	International shipments (Broomhall)								Net exports from	
	Total	North America	Argentina	Australia	Russia	Danube	India	Other	United States	Canada
1921	217.4	178.4	6.9	29.3	2.3		.2	.3	147.7	71.8
1922	218.8	183.6	24.7	6.9	2.6		1.0	....	105.0	128.8
1923	221.9	151.2	31.8	14.7	8.9	4.2	4.8	6.3	63.0	126.2
1924	255.0	201.4	26.7	12.3	.3	1.1	12.4	.8	147.8	76.0
1925	207.5	145.3	18.7	10.4	11.2[a]	2.4[a]	1.4	17.7	34.4	123.9
1926	232.8	183.3	7.0	5.7	15.6	5.2	2.4	13.6	107.8	109.3

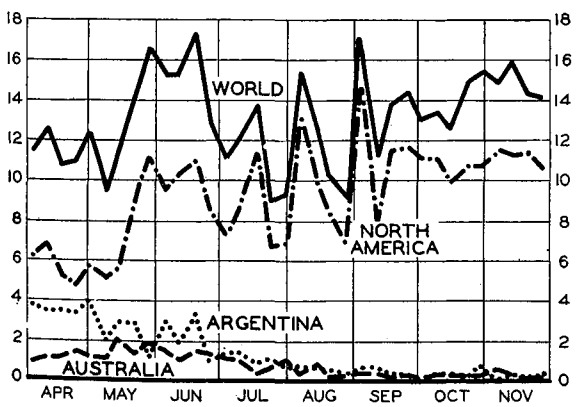
* Shipments are figures for 17 weeks, from Broomhall's *Corn Trade News*. Net exports are official data.

[a] Combined shipments from Russia, Danube, and Black Sea were reported as 14.0 million bushels which differs slightly from the sum of items here given.

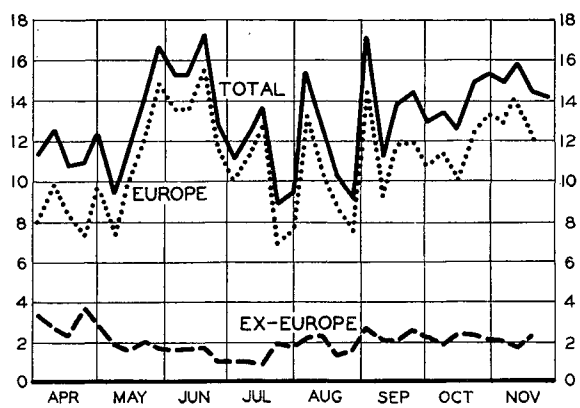
CHART 5.—INTERNATIONAL SHIPMENTS OF WHEAT AND FLOUR, WEEKLY, APRIL–NOVEMBER 1926*

(Million bushels)

A. BY PRINCIPAL AREAS OF ORIGIN



B. BY AREAS OF DESTINATION



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

[1] *Pesti Naplo* (Budapest), October 24, 1926.

V. WHEAT PRICE MOVEMENTS

The Level of Wheat Prices

During the first few months of the crop year 1926–27, wheat prices have fluctuated within relatively narrow limits, on a level distinctly above that of the same period in 1923–24 but not so materially different from the average level in the corresponding period of the two intervening years. Chart 6 affords convenient illustration of these contrasts.

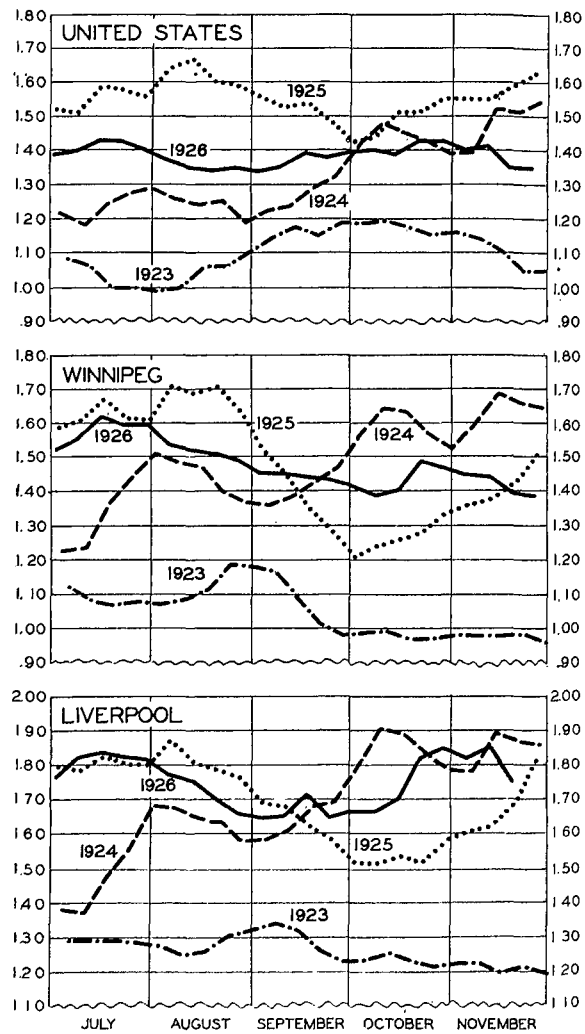
Weekly average cash prices of all wheat sales in five leading primary markets in the United States fluctuated in July–November 1926 between $1.34 and $1.43 per bushel. Both declines and advances were less pronounced than in this period of any of the three preceding years. The level has been lower than in 1925, when winter wheat crops were so short that American prices of representative wheats were above an export basis. But it has been higher than in July–September 1924, before the upward shift in wheat price levels was completed; and considerably higher than in July–November 1923.

Weekly average cash closing prices of No. 1 Manitoba Northern in Winnipeg have also fluctuated within moderate limits. The extreme range was only from about $1.39 to $1.62, and after new crop wheat came to market, only from about $1.39 to $1.49. The decline between old crop and new crop was much less than in 1925, and there was no autumnal advance at all comparable to that of either of the two preceding years. The 5-month unweighted averages for the past three years are fairly close together, at about $1.48, and much higher than in 1923.

Liverpool prices (parcels afloat in near positions) of No. 1 Manitoba Northern show distinctly greater fluctuations, though even these were less pronounced than those of 1924 or 1925. August witnessed a heavier decline and October a more striking advance than occurred in North American markets. The 5-month unweighted average for 1926 is not only far above that of 1923, but distinctly higher than for either 1924 or 1925. Clearly this reflects the influence of the freight situation, and in conjunction with the other charts it strongly suggests that British importers bore the brunt of the advance in shipping costs during most of the period.

Chart 6.—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, July–November, 1923–26*

(U.S. dollars per bushel)



* Data compiled from *Crops and Markets*, *Grain Trade News*, and *Corn Trade News*.

The comparative stability of prices in North American markets in 1926 is attributable to several causes. It has occurred in the face of an increasingly easy statistical

position, as prospects for good crops in Canada and the Southern Hemisphere ripened into certainties. Heavy marketings of American winter wheat prevented the development of a special tightness during the summer; and because of very light stocks in this country last June, and low stocks and delayed harvests in Europe, these supplies were readily absorbed by millers and exporters without serious or continued price depression, though at lower prices than had prevailed after the short harvest of winter wheat in 1925. The willingness of the Canadian Wheat Pool to accumulate large stocks without hedging or pressing them upon the market has doubtless prevented more pronounced declines in Canada, the United States, and overseas markets. Had the Pool sold freely, exporters might have been forced to bear a larger share of the burden of increased freight charges. Whether the temporary advantage will be offset by price reductions on subsequent sales it is still too early to say.

Nothing has happened this year, as it did in 1924 and 1925, to cause a serious tightening of the international position for the crop year as a whole. Moreover, crop developments and changes in import requirements have not been of such a character as to cause exceptional speculation,[1] which frequently tends to exaggerate price swings in a brief period. On the other hand, the world wheat markets have not yet responded at all fully to the distinctly easier international statistical position for the crop year as a whole as compared with last year. The course of freight rates, the ready absorption of American winter wheat, the limited supplies of good-quality old wheat available in the Southern Hemisphere, and Canadian Pool policies have been jointly responsible for deferring the price adjustment indicated by the larger margin of exporters' surpluses over import requirements discussed in Section VI below.

[1] The average daily volume of future trading in all United States markets in the four months of the period has run as follows in the past three years, in million bushels:

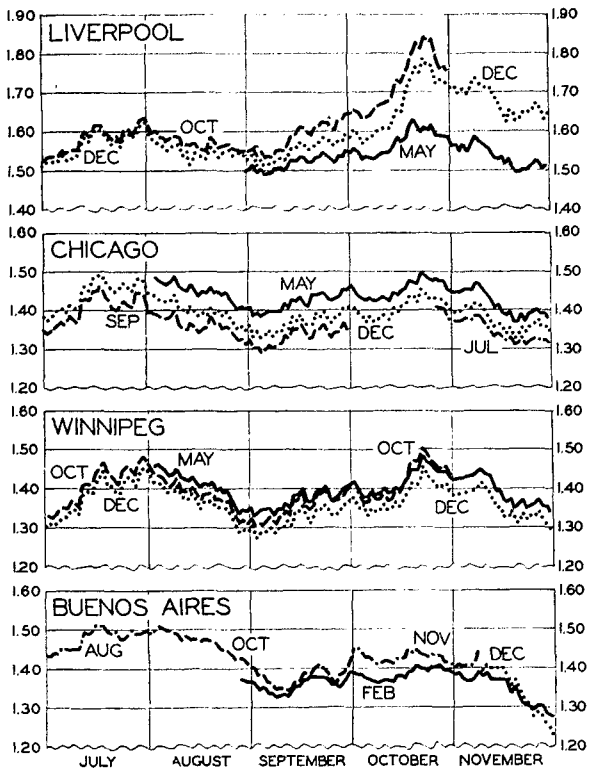
	August	September	October	November
1924	50	43	61	61
1925	60	59	60	65
1926	47	46	44	53

The Course of Prices

Despite the unusual freedom from extreme fluctuations in the course of futures prices from August to November, certain well-defined movements common to all markets of major importance appeared during the period. As shown by Chart 7, futures prices fell from late in July until

Chart 7.—Daily Closing Prices of Principal Wheat Futures in Four Leading Markets, July–November 1926*

(U.S. dollars per bushel)



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

early in September, then advanced until about October 22, with a brief interruption early in October, and fell from October 22 to November 19, thereafter remaining at approximately the same level. The general movements were essentially similar in all four markets, but the extent of the September–October rise was greatest in Liverpool, and the November decline was sharper in Buenos Aires than elsewhere. Except in Liverpool, none of the movements caused a radical departure

from the average for the period. Market traders were often at sea as to the real significance of current information, and particularly as to the price influence of the actual and prospective freight rates.

The major movements were due primarily to changing crop prospects—for United States crops during early August, for Canadian crops during September and most of October, for Argentine crops during November. Day-to-day changes in futures prices, particularly during the September–November period, were attributable to weather reports and forecasts. More fundamental factors were the fairly steady pressure of European demand, until late in October, and the gradual increase of visible supplies.

The decline in prices from July 31 to September 4 was caused by reports of unexpectedly good threshing returns in the American winter-wheat belt and by exceptionally heavy marketings, larger in volume than excellent export and milling demand could absorb. The breaking of the Canadian drought followed, counteracting the influence of the low Canadian official estimate of August 10 (317 million bushels as against the previous estimate of 349 million). United States visible supplies continued to rise, and no notable European buying pressure developed despite late harvests and unfavorable weather in Europe. Good prospects for Canadian crops were confirmed by the *Manitoba Free Press* report of August 21, and by other private reports issued on September 1. By the end of August the Canadian outlook dominated all markets.

Declining receipts of American winter wheat, the certainty of a poor crop of spring wheat, rains and delayed movement of wheat in Canada, and increased European demand combined to inaugurate an uncertain upswing after September 4. Canadian weather reports dominated the later movement, but slow American and European marketing and reductions in European crop estimates were important factors. The abrupt rise of freight rates in mid-September contributed an element of uncertainty, and traders were by no means unanimous in adjudging its probable effect on prices. During most of September and October day-to-day fluctuations in prices were occasioned by news of Canadian weather. Reports of frost in Argentina contributed to the sharp rise in the few days before October 22; but in Liverpool the major factor was the great advance in freight rates, and Winnipeg and Chicago prices advanced in sympathy with Liverpool.

After October 22, with the quantity if not the quality of Canadian crops fairly well assured, interest centered upon crop developments in the Southern Hemisphere and the rapidly increasing visible supplies in Canada, as well as upon unexpectedly heavy shipments from Danube and Black Sea ports. It became increasingly apparent that a heavy European demand for North American wheat could not be expected to materialize while a possible strike settlement held forth the prospect of lower freight rates. Meanwhile visible supplies in Canada continued to rise to unprecedented heights for this season; it became increasingly evident that large stocks were available for export in Russia; and an early harvest of excellent crops in the Southern Hemisphere appeared more and more probable. European farmers began to market more rapidly. Under these circumstances futures prices, which had been fluctuating within narrow limits from October 22 to November 10 with a tendency to break under the accumulation of bearish news, fell sharply on the appearance of the official Canadian estimate of 406 million bushels and the sharp decline in freight rates. During the last half of November prices fluctuated uncertainly within a narrow range, sensitive to alternatively favorable and unfavorable reports of weather conditions in Argentina, but supported (in Chicago) by short covering.

Relations of Futures in Different Markets

In export markets the relations between near and distant futures were fairly normal during the period August–November. In Chicago, the September future remained consistently below the December, the December consistently below the May, without notable variations in spreads. These are

the normal relationships of old-crop futures. The September future was closed out quietly. In Winnipeg, as usual, the May and October options ran above the December throughout; but the October premium over the December widened after the middle of October when freight rates rose so sharply.

One significant development was evident in Buenos Aires. The December future, like the October and November options, normally ranges above the February option up to the end of November or later, often until closed out in mid-December; but this year it fell below the February option in the last week of November. This apparently represented a transfer of the December future from the old-crop basis to the new, reflecting current Argentine opinion that new-crop wheat would be available in some volume for December delivery.

The most important peculiarity of futures relationships appears with respect to the high premiums borne by the October and December options over the May in Liverpool in the latter months of the period. The spread between the December and May options was about normal in early September, about 2.5 cents. By the end of October, however, it had risen to 14 cents, and this figure was maintained throughout November. Last year, when the premium borne by near over distant futures was unusually large on account of the tight international position during the late autumn, the spread seldom reached 10 cents. The unusually wide spread this year was undoubtedly due to the advance in ocean freight rates, and represented the conviction among British traders that wheat would be obtainable in the spring at much lower c.i.f. prices than were possible so long as ocean freight rates remained unusually high.

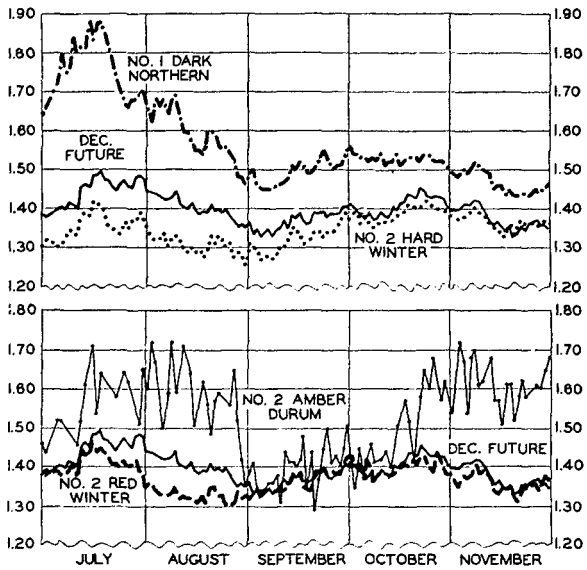
United States Cash Prices

Cash prices of important types of American wheat have for the most part fluctuated in accordance with the movement of futures, as shown by Chart 8. Certain divergencies, however, are apparent.

Prices of No. 2 Amber Durum at Minneapolis have shown very wide day-to-day fluctuations, as a result of a narrow market and comparatively few sales. From a high level in July and August, when old-crop wheat was sold, prices broke heavily as the new crop came to market; and a low level prevailed throughout September and the first week of October. Later a much higher level was attained, largely because of the shortness of the crop (estimated at 53 million bushels) and active domestic demand, but also presumably because of good export demand from Italy, caused in part by short crops in North Africa.

Chart 8.—Daily Cash Prices of Typical Wheats in United States Markets, and Closing Prices of the December Future in Chicago, July–November 1926*

(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 *Crops and Markets* and *Chicago Journal of Commerce*.

During early July old-crop No. 1 Dark Northern Spring rose to a high premium. Prices declined with the approach of harvest and in part because of extraordinarily heavy purchases of hard red winter wheat by Minneapolis mills.[1] The excellent size and quality of the hard winter-wheat crop and its enhanced substitutability for hard red spring acted to restrain premiums on hard red spring from rising to the extent that might have been expected in view of the very small crop.

[1] See Wheat Studies, September 1926, II, 339.

Both hard red and soft red winter wheat prices paralleled the course of the December future rather closely. In July and August, however, both classes were sold considerably below the December future, in consequence of exceptionally heavy marketings too large to be fully absorbed by millers and exporters. The narrowing of the spread between the December future and prices of No. 2 Hard was in part a normal seasonal movement induced by declining carrying charges; but the reduced marketings of September–November were also influential. The slight premium borne by No. 2 Red over No. 2 Hard in September and early October reflects the floods in the Ohio Valley district. During the latter months moisture content became a more important factor than protein content in determining premiums in most classes of wheat.

Since new spring wheat came to market, prices of No. 1 Dark Northern in Minneapolis have run at approximately the same level as prices of No. 1 Northern Manitoba at Winnipeg, mostly a little higher.[1] This is in sharp contrast with last year when, from September to December, Minneapolis prices exceeded those of Winnipeg by a wide margin. Despite tariff protection and the short crop of hard spring wheat, Minneapolis prices have been nearly down to an export basis on account of the interchangeability of hard red winter and hard red spring wheats.

European Prices

European prices[2] of domestic wheat, variously affected by diverse qualities, tariff regulations, domestic marketing, and fluctuating exchange rates, have as usual differed from the prices of wheats moving in international trade. More than a brief summary of significant information is impossible in limited space.

In Roumania, following a large crop of poor-quality wheat little desired by importers and hampered in movement by deficient transport facilities, low prices prevailed and farmers were reluctant to sell. In Russia, though prices were lower than in 1925[3] and fluctuations were less marked, more grain was secured for export. Hungarian prices rose rapidly during October in response to the unusually active demand for exports stimulated by the ocean freight rate situation. Italian prices of domestic wheat in terms of lire were governed chiefly by fluctuations in exchange rates, falling steadily throughout the period except for an interruption in early November, when the lire depreciated. In terms of gold the price movement was reversed. In France extremely reluctant marketing by farmers and the short crop kept French prices of native wheats at a level much higher than last year's. A notable decline began in mid-November as marketings rapidly increased and the franc reached the highest level of recent months. From November 15 to 22 the price per quintal declined from about 220 to about 190 francs. This was in part due to the provision for refunding nearly half of the duty on wheats imported after October 18, but also to the decline in ocean freight rates and increasingly good prospects for still lower import prices.

In Germany prices moved on a very even course, well above those of 1925, and above export parity until mid-September. A rise occurred in October and a decline in mid-November, in accord with the international movement. English prices fell rapidly throughout August, maintained a steady low level in September, and rose through October to mid-November, thereafter declining.

The factors responsible for these diverse movements varied from country to country. Nevertheless certain common influences may be inferred. The increase of prices in several countries in October was due in part to the rapidly rising ocean freight rates which forced importers to seek near-at-hand supplies. Here the Hungarian and

[1] See *Foreign Crops and Markets*, November 22, 1926, XIII, 698.

[2] See Appendix Tables VIII and IX. Supplementary price series have been secured from the German *Industrie und Handelszeitung* and the French *Bulletin des Halles*.

[3] The *Ekonomicheskaia Zhizn* of October 27, 1926, reports August and September prices in roubles per centner by ten-day periods as follows:

	August			September		
	1–10	11–20	21–30	1–10	11–20	21–30
1925.....	7.39	7.39	7.81	7.88	8.06	7.81
1926.....	6.40	6.47	6.57	6.58	6.59	6.50

English experiences may be regarded as the clearest examples. The mid-November decline, also common to several countries, was due in part to increased confidence among millers that good imported wheat would soon become available more cheaply as freight rates declined, and hence to the relaxation of pressure to purchase near at hand. Although the diversity of important influences renders analysis complex, the general effect produced by the advance in ocean freight rates is broadly apparent. European domestic prices were for a time artificially enhanced.

VI. THE INTERNATIONAL POSITION AND OUTLOOK

Having reviewed the salient features of the first few months of the current crop year, we are now ready to consider the statistical position for the year as a whole, with special reference to importers' requirements and exporters' surpluses. Only thus can one judge, with even approximate accuracy, the outlook for international trade and world prices in the ensuing months and the prospects for outward carryovers.

Margin of Export Surpluses Over Importers' Requirements

For the current crop year as a whole, the international position appears distinctly easier than in either of the two preceding years. The world crop, either excluding or including Russia, appears to be slightly larger than the large crop of last year. More important, the available surpluses in exporting countries as a whole are much larger than in either of the two preceding years, while importers' essential requirements are not correspondingly increased. Broomhall, for example, has maintained since August 10 an estimate of 704 million bushels for importers' requirements, but in view of crop developments in Canada, Australia, and Argentina he has gradually raised his estimate of available surpluses in exporting countries from 768 million bushels on August 10 to 856 million on November 9. The latter figures suggested a margin of 152 million bushels. *The London Grain, Seed and Oil Reporter* estimates the margin as higher still, chiefly because it includes in the available surplus stocks of old wheat on August 1, 1926, and makes no offset for stocks on August 1, 1927. Its estimates of August 20 set exportable surpluses of 832 million against import requirements of 672 million, while its estimates of November 12 showed corresponding figures of 936 and 696, implying a margin of 240 million. These margins are very large by comparison with 1924–25 and 1925–26, though by no means as large as the unusually wide margins prevailing in 1923–24.[1]

Table 7.—Trade Estimates of Exporters' Available Surpluses for 1926–27

(Million bushels)

Export area	Broomhall's *Corn Trade News*		*London Grain, Seed and Oil Reporter*	
	Aug. 10	Nov. 9	Aug. 20	Nov. 12
United States	200	200	240+ 8[a]	240+ 8[a]
Canada	248	304	224+32	304+32
Australia	88	104	72+ 8	104+ 8
Argentina	120	144	120+48	144+32
Russia	40	40		
Danube basin	48	40	80	64
India	16	16		
Others	8	8		
	768	856	736+96[a]	856+80[a]

[a] Figures after + sign represent estimated exportable stocks on August 1, 1926.

These estimates lead to inferences that during the next six months importers will have no serious difficulty in meeting their essential import requirements, that declines in export prices will stimulate import purchases, and that carryovers will be substantially increased in exporting countries and probably (of import wheat) in importing countries. Though we do not wholly endorse the calculations of either of these authorities, as set forth in Table 7, we see no reason to question the essential soundness of the inferences to which they lead. In the light of this situation we are disposed

[1] Cf. Wheat Studies, December 1926, III, 83–4.

to estimate import requirements for the year more liberally, and probable exports more conservatively, than if the international statistical position were tight. We expect that the volume of international trade will be larger than in any year except 1923–24 and will approach the record established in that year. New crop developments in the spring and early summer of 1927, however, will probably exert, as usual, considerable influence on the international trade in the closing months of the year and upon the year's totals.

Importers' Requirements in 1926–27

Table 8 presents our estimates of importers' requirements by the principal importing areas, in comparison with less comprehensive estimates by other students of the wheat situation. Our estimates are made on the basis of most recent evidence regarding quantities and qualities of crops, tariffs and consumption restrictions, and international purchasing power, and on assumptions that freight rates and wheat prices will fall below recent levels. They are necessarily preliminary, since later developments may alter both facts and assumptions.

Net imports of Great Britain and the Irish Free State we estimate at around 235 million bushels. This amount of imports would give the British Isles only a little larger consumption than the average for the five years 1920–25. Though apparently per capita use of wheat is declining and large unemployment may make for reduced consumption, we believe these factors will be fully offset by additions to stocks later in the crop year. We assume that the coal strike may be regarded as practically settled (though not promptly restoring normal conditions in the coal and shipping trades), that ocean freight rates will fall considerably below their recent levels, and that price considerations will be conducive to raising wheat stocks above the low levels of last summer. We consider that last year net imports and apparent domestic utilization were especially low chiefly because of drafts upon unreported stocks, and that because of this depletion net imports this year are likely to be more rather than less than sufficient to give average apparent domestic utilization.

Italy's net imports we estimate at 75 million bushels, sufficient to yield within 10 million bushels of the large supplies for domestic use recorded last year. This seems a liberal estimate in view of the high rate of extraction and stringent regulations respecting flour manufacture and sales, which are said to be strictly enforced. But official estimates run but little lower, and some trade estimates are higher. We are influenced toward maintaining this figure by evidence that Italy's population and per capita consumption of wheat are increasing, and that domestic utilization was very heavy last year in spite of high prices and considerable reduction in quality of flour.

Table 8.—Forecasts of Net Imports in 1926–27*

(Million bushels)

Country	Broomhall	*London G.S. & O. R.*		U.S.Dept. of Agric.	Food Res. Inst.
	Aug. 10	Aug. 20	Nov. 12	Oct. 25	Dec. 13
British Isles	224	200[a]	200[a]	218-241	235
Italy	72	80	72	60- 75	75
Germany	56	48	56	60- 75	80
France	40	80	88	45- 60	65
Belgium	32	40	44	38- 40	40
Netherlands	26	24	28	26- 30	27
Scandinavia	26	..	..	17- 22	22
Switzerland	14	..	..	14- 16	15
Austria	16	12	16	.....	17
Czecho-Slov.	22	..	..	15- 20	22
Baltic States	..	..	..	4- 5[b]	8
Portugal	4	8[c]	8[c]	.....	6
Greece	20	..	..	.....	20
Other Europe	8[d]	60	64	.....	8[e]
Europe	560[f]	552	576	497-584[g]	640
Ex-Europe	144[f,h]	120	120	116-152	140
Grand total	704	672	696	613-736[g]	780

* For crop year August–July, except U.S.D.A. estimate, which is for the year July–June. The estimates of the first two authorities are for *shipments* to the destinations given. Dots (....) indicate items for which no separate estimates were made.

[a] United Kingdom only. [b] Finland only.
[c] Including Spain. [d] Includes Baltic States.
[e] Turkey, Malta, and others.
[f] On September 14 Broomhall revised the total to 576 for Europe and 128 for ex-Europe (direct shipment), without reporting detailed revisions. Apparently the increase was distributed chiefly between Italy, Germany, and France.
[g] Excluding countries for which our estimates total 56 million bushels. [h] Direct shipments.

Germany's net imports we think may reach 80 million bushels. Inward carryovers of native wheat were very small. The 1926 wheat crop is notably light in weight, and probably smaller than the latest official estimate indicated. Crops of rye and potatoes are smaller and their prices much higher than last year. Wheat imports of the volume suggested would give Germany only a little larger wheat consumption than in 1925–26. In view of the tariff and the state of crops, our estimate may be excessive, but we believe other estimates are too low.

Net imports of France are very difficult to estimate. Our estimate of 65 million bushels is well below those of some trade observers, well above those of others; but the lower estimates were made on the assumption of a larger crop. On the basis of the latest crop estimate this would give France a smaller amount for domestic consumption than in recent years of large crops. This we consider reasonable in view of the quality of the current crop, the tendency to reduce consumption, feed, and waste when the crop is small, the higher prices prevailing, and public measures to restrict consumption. But the partial suspension of the tariff duty and the appreciation of the franc tend to encourage importation. This year, as in 1924–25, current statistics of net imports will understate actual imports because of the method of refunding the duty.

In Austria and Czecho-Slovakia, wheat crops are not much smaller than last year but are much poorer in quality, and substitute foods are less abundant. Higher tariffs have been adopted, but the Austrian duties have been temporarily reduced. Hence we estimate larger net imports than in 1925–26 for Austria, and about the same amount for Czecho-Slovakia, where imports in June and July 1926 were heavy in anticipation of the tariff advance. The other estimates hardly warrant detailed comment.

In all we expect net imports of European importing countries to reach 640 million bushels—a larger total than in any recent year except perhaps 1924–25 and as much as in that year despite the fact that crops of these countries are larger in 1926 than they were in 1924.

Ex-European import requirements are even more difficult to estimate, and no adequate check on the accuracy of estimates is possible. A recent detailed estimate by the United States Department of Agriculture suggested a range of 116–152 million bushels.[1] Our estimate of 140 million includes (as Broomhall's does not) grain and flour exports from European importing countries as well as direct shipments from exporting countries which Broomhall now estimates at 128. Like Broomhall, we expect ex-European takings to be less than in 1925–26, in part because Japanese import stocks were heavily increased last year. But we anticipate that ex-European demand will be considerably increased if and when freight rates and wheat export prices have declined.

Our estimates are considerably larger than those of other observers as given in Table 8, partly because they are more comprehensive, but also in part because for several individual countries our estimates are more liberal. Our total figure for Europe is about the same as the maximum figure suggested in the October 25 estimate of the United States Department of Agriculture supplemented by our estimate for countries not covered by their figures. Our total for Europe and non-Europe is slightly higher than the top of the range of 755–775 million bushels recently suggested by the International Institute of Agriculture.[2] We consider that the crop developments in Europe in recent months point to larger import demands, and that more definite prospects for substantial exports from Russia, Canada, Argentina, and Australia will make for reductions in international prices to a point tending to stimulate purchases by importing countries.

Probable Exports in 1926–27

Our preliminary estimates of probable net exports during the year ending July 31, 1926, are given in Table 9 (p. 168), together with some estimates by other students of the situation.

[1] *Foreign Crops and Markets*, November 22, 1926, XIII, 695.

[2] *International Crop Report and Agricultural Statistics*, November 1926, p. 578.

For the principal exporting countries our forecasts of probable exports rest upon our estimates of the probable disposition of the latest wheat crops in comparison with a summary of our previously published analysis of the disposition of the two previous crops. (See Appendix Table X.)

For the United States we assume that wheat milled for domestic consumption will be slightly lower than last year because of a higher rate of extraction made possible by selection from a larger crop of good quality,[1] and in spite of some increase in population and possible increases in flour stocks. We estimate a larger use for feed and waste than last year's exceptionally low figure, because of the larger wheat crop and lower prices, and shorter crops of feed grains. We assume a substantial increase in the carryover from the low figure of June 30, 1926. Accordingly we conclude that net exports, including some 2.5 million bushels shipped to possessions, will be around 170 million bushels if the crop estimate of 832 million proves correct. These figures are for the year July–June; for the year ending July 31, 1927, we infer that net exports are not likely to be larger. Higher estimates of United States net exports, in our judgment, give too little weight to prospects for replenishing of wheat stocks.

For Canada, we assume increases in all the items of disposition, and especially in the carryover, and suggest a figure of 290 million for probable exports during the year. Our estimate for Canada is subject to alteration after the official estimate of the crop is revised in January; but it appears that the Dominion Bureau of Statistics has this year had a surer basis for estimate than in either of the two preceding years. In view of the existence of the Canadian Wheat Pool, it is conceivable that the Canadian carryover may be considerably larger, and Canadian exports appreciably smaller, than our forecast suggests.

[1] In the four months of July–October 1926 the mills reporting to the Census Bureau showed an average of 4.56 bushels of wheat ground per barrel of flour, as compared with 4.60 and 4.62 in the corresponding periods of 1924 and 1925.

[2] The sum of early estimates by the wheat-growing states.

For Argentina we assume a crop of 215 million bushels, as shown by the first official forecast; domestic requirements slightly larger than usual though much less than in 1925–26; and stocks on August 1, 1927, somewhat larger than on that date in 1926 and containing less inferior grain. Thus we conclude that Argentine exports will be about 140 million bushels in the year ending July 31, 1927.

TABLE 9.—FORECASTS OF PROBABLE NET EXPORTS BY EXPORTING COUNTRIES IN 1926–27*

(Million bushels)

Exporting area	Broomhall		U.S.D.A.	F.R.I.
	Aug. 10	Sept. 14	Oct. 25	Dec. 13
United States	176	168	189-220	170
Canada	224	272	270-300	290
Argentina	112	96	.....	140
Australia	80	64	.....	95
Russia	40	40	.....	40
Danube basin	48	40	30- 51	40
India	16	16	.....	10
Others	8	8	5- 10[a]	5
Total	704	704	485-581[b]	790

* For crop year August–July, except U.S.D.A. estimate, which is 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.

[b] Exclusive of countries for which our estimates total 288 million bushels.

For Australia we assume a crop of 154 million bushels,[2] a slightly larger domestic use than in 1925–26, and a considerable increase in stocks. Thus the exports August–July are estimated at 95 million bushels.

In our judgment, therefore, the four great exporters seem likely to export some 695 million bushels net, in addition to increasing stocks at the end of next July. Since all of the crop figures are subject to revision, these and other later developments may require substantial alteration in the foregoing preliminary estimates. It is impressive to observe, however, that our conservative estimate of probable exports by these four countries alone is not far below the latest estimates of world importers' requirements published by Broomhall and the *London Grain, Seed and Oil Reporter.*

For other exporting countries there exists much less satisfactory material for

making reasoned forecasts of net exports. We regard our figures as subject to a wide margin of error, but as conservative in the aggregate.

Outside the great exporters Soviet Russia offers the prospect of the largest export supplies, but her exports are most difficult to forecast. Her 1926 wheat crop was apparently not much smaller than last year, though her other crops, except of maize, seem not to be as large. The present crop year opened with stocks of grain apparently of at least normal dimensions, much larger than the year before. Collections for export have been proceeding more satisfactorily than in the same period of 1925, and in spite of high freight rates superadded to the usual handicaps, Russian exports in the period August–November have been several million bushels larger than last year. Though we do not believe that actual exports for the year will approach the figures which might seem possible on the basis of crops and stocks, we consider 40 million bushels a conservative estimate of probable net exports of wheat as compared with about 27 last year.

Similarly we consider 40 million bushels a reasonably conservative estimate of net exports from the four countries of the lower Danube basin, as compared with a total of some 44 in 1925–26 when these countries suffered under the double handicap of low initial stocks and the inferior quality of the crop of 1925. Hungary's export surplus was recently estimated by Broomhall's Budapest correspondent as nearly 24 million bushels,[1] of which nearly half had been exported in August–October. Believing the domestic requirements somewhat understated, we regard 20 million bushels as a conservative estimate of Hungary's probable net exports. Jugo-Slavia's 1926 wheat crop has been officially estimated at about as large as the large one of 1925, when net exports were 12 million bushels. Threshing returns give reason to expect a reduction of the estimate and the new crop is said to be of poorer quality than of 1925; hence it may not be greatly in demand abroad. Moreover stocks of old wheat were reported practically exhausted before the new crop came to market. Accordingly we are disposed to estimate that net exports will be about 8 million bushels. Official estimates of Roumania's export surplus, even after heavy reductions from the rosy forecasts of last July, have been well over 20 million bushels. Both carryover and new crop wheat are said to be generally unsatisfactory in quality, and transport difficulties, currency instability, and the export duty continue to restrict exports. For three months from August 5 the export duty was maintained at 13,000 lei per carload (equivalent to about 17 cents per bushel)—a much lower figure than in 1925–26, but this was advanced in November to 18,000 lei, the figure obtaining during the latter part of 1925–26.[2] We consider it highly probable that net exports will reach 10 million bushels, and they may be larger. Bulgaria, from a substantial carryover and a crop of good quality well in excess of usual domestic requirements, is likely to export at least 2 million bushels.

In sum, Soviet Russia and the exporting countries of the lower Danube basin may be expected to make net exports of 80 million bushels and still show heavy wheat consumption and increased carryovers. If expectations from other export sources should be radically reduced and international prices be such as to stimulate instead of to restrict exports, a considerably larger contribution from these areas might conceivably be made.

Little wheat will be available from other export sources. India's wheat crop of 1926 afforded little surplus for export, and net exports since August 1 have been very small; but in view of favorable prospects for the harvest of March–May 1927 we consider 10 million bushels a conservative estimate of her net exports in the year August–July. Broomhall's estimate is 16 million, and the International Institute, on the basis of questionable estimates showing a large carryover on April 1, 1926, considers that

[1] *Corn Trade News*, November 16, 1926. This estimate, in thousand bushels, was derived as follows:

Crop		66.1
Seed requirements	9.2	
Consumption	31.2	
Unfit for seed or milling	1.8	42.2
Remaining for export		23.9

[2] See WHEAT STUDIES, December 1926, III, 86.

this amount of this year's crop was available for export on August 1, 1926.[1]

North African exporting countries have apparently very little export surplus from the 1926 crops; we question whether their net exports in the year August–July will greatly exceed 2 million bushels. Poland has exported some wheat from the 1926 crop, but the movement is apparently about over, and the net export will probably be less than 1 million bushels. Chile's good crop harvested early in 1926 yielded less for export because of depleted stocks, and even with a fair crop this year we doubt if exports in the year August–July will much exceed 3 million bushels. Accordingly our conservative estimate for these and other minor exporters is 5 million bushels.

Total net exports by exporting countries, according to our estimates, bid fair to reach 790 million bushels, a larger total than in any year except 1923–24. This figure is larger by 10 million bushels than our forecasts of net imports because we expect stocks afloat on August 1, 1927 to be higher than on August 1, 1926. Broomhall's latest available estimate of exports is much smaller because he figures upon only sufficient to supply import requirements estimated at only 704 million bushels. His estimates by countries differ from ours chiefly in respect to Argentina and Australia, from which he forecasts exports of only 160 million as compared with our forecast of 230 million. While stocks in these countries on August 1, 1927, may conceivably exceed even the high figures we have assumed, we cannot believe that our forecasts of net exports from the Southern Hemisphere are radically excessive on the basis of current crop estimates.

Our position as to the large volume of international trade during the crop year is based in part upon evidence of heavy trade in recent months, and in part upon our view that large export supplies will depress prices, thus tending to stimulate export purchases.

[1] *International Crop Report* and *Agricultural Statistics*, November 1926, pp. 578, 581.

The Outlook for United States Prices

We consider it quite probable that prices of representative American wheats may not share in the decline (from the late November level) which we anticipate in world market prices, at least to the full extent. Seasonal influences will be upward for several months. Net exports in July–November were about 127 million bushels. If the crop is correctly estimated and our expectations regarding the carryover prove well founded, there will remain for export after January 1 little representative wheat in the form of grain. Farmers and co-operative marketing associations may be expected to resist price declines by holding their grain, and it seems not improbable that prices of hard and soft red winter wheats will rule above an export basis, as hard spring wheat has done for most of the season.

In retrospect we believe it will appear that American farmers did well to market heavily in the early summer, when the international position was still fairly tight; and that they have distinctly profited from temporary conditions obtaining in the world wheat situation. The most profitable marketing policy for American winter-wheat growers is never clear early in the crop year: the outcome of crops in the North American spring-wheat belt, in the Southern Hemisphere, and to some extent in Europe, is for several months uncertain. In some years, like 1924, autumn crop developments turn out to favor restricted early marketings; but in other years, of which the present bids fair to be an example, the reverse is true.

This survey has been written by M. K. Bennett and Joseph S. Davis, with the aid of Robert D. Calkins and the statistical staff of the Institute. For information concerning the French and Italian situations we are indebted to our correspondents, M. Michel Augé-Laribé, Paris, and Mme. Olivia R. Agresti, Rome

APPENDIX

TABLE I.—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	1926–27
Aug.	65.3	93.0	43.3	71.6	2.0	1.3	1.2	1.5	.00	.32	.55	.09
Sept.	45.3	82.1	57.9	48.7	28.3	7.1	45.7	32.8	.21	.24	.29	.26
Oct.	40.5	88.0	36.0	37.2	67.0	40.9	53.2	56.1	3.23	4.14	7.04	5.87
Nov.	37.2	60.5	34.1	28.2	72.5	42.7	51.5	60.5	3.04	4.93	9.79	....
Aug.–Nov.	188.3	323.6	171.3	185.7	169.8	92.0	151.6	....	6.48	9.63	17.67	....
Dec.	28.4	36.3	34.9	....	51.9	20.3	53.5	....	6.76	3.91	6.14	....
Jan.	15.9	24.7	21.6	....	12.7	4.1	10.5	....	7.27	4.42	10.03	....
Feb.	19.8	19.9	16.2	....	3.9	6.2	4.0	....	7.32	2.36	7.74	....
Mar.	18.0	17.3	15.1	....	2.5	8.5	3.2	....	8.09	.97	6.98	....
Apr.	10.1	10.4	14.0	....	6.4	8.1	1.8	....	6.47	1.03	3.57	....
May	15.4	17.6	15.7	....	15.8	7.1	17.2	....	5.24	2.09	1.20	....
June	16.4	21.9	21.1	....	21.2	4.1	13.6	....	3.06	.90	.22	....
July	35.1	41.8	77.0	....	13.1	6.7	6.4	....	1.31	.22	.27	....
Aug.–July	347.4	513.5	386.9	....	297.3	157.1	261.8	....	52.00	25.53	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.*

TABLE II.—WEEKLY WHEAT RECEIPTS AT PRIMARY MARKETS IN THE UNITED STATES AND CANADA*

(Million bushels)

Month	United States				Fort William and Port Arthur				Vancouver			
	1923	1924	1925	1926	1923	1924	1925	1926	1923	1924	1925	1926
July	3.80	1.34	4.95	8.80	1.94	4.32	1.33	1.95	.11	.42	.05	.05
	4.30	6.92	7.59	13.79	1.84	4.55	1.80	2.04	.04	.62	.05	.10
	6.71	8.57	7.75	14.25	1.18	3.03	1.90	1.63	.00	.30	.06	.06
	13.67	10.05	11.67	19.26	.81	1.73	1.31	1.19	.01	.13	.03	.01
	15.95	17.52	13.77	25.25	.63	1.41	.97	.92	.00	.11	.03	.05
Aug.	15.97	22.86	11.04	23.63	.54	.47	.38	.75	.00	.00	.28	.03
	14.33	22.32	10.15	18.84	.29	.29	.23	.22	.00	.00	.23	.02
	13.16	21.89	8.98	13.92	.31	.11	.24	.21	.04	.19	.02	.02
	13.47	20.08	8.99	10.89	.00	.14	.15	.15	.06	.02	.02	.03
Sept.	10.65	19.45	11.29	12.92	.90	.15	.59	1.12	.00	.01	.02	.06
	11.57	20.37	13.13	12.47	1.93	.41	6.20	3.02	.00	.01	.01	.10
	11.41	18.88	14.15	11.73	8.32	.87	13.27	6.69	.01	.04	.09	.07
	9.44	17.54	14.99	9.77	13.20	3.09	15.83	12.49	.05	.17	.17	.03
Oct.	9.37	17.52	12.37	9.21	16.17	7.92	16.39	13.51	.35	.48	.29	.07
	7.70	20.48	9.42	8.71	13.73	10.64	15.73	12.48	.85	1.12	1.12	.24
	9.77	20.11	7.53	7.30	15.32	8.67	10.72	10.82	.62	.84	1.86	.75
	7.47	19.85	6.19	8.68	15.41	7.64	9.85	13.59	.77	.91	1.93	1.90
	8.35	19.09	6.72	9.38	14.66	10.07	10.35	14.37	1.01	.79	1.64	2.92
Nov.	9.32	17.05	7.95	8.27	17.04	9.88	8.88	12.46	.34	.94	2.46	3.33
	9.83	13.61	7.18	7.21	16.82	9.88	10.80	14.16	.58	1.73	2.53	1.45
	8.06	13.37	8.68	6.59	17.16	9.41	13.67	15.00	.68	1.50	2.10	.92
	6.96	13.29	8.70	5.86	17.19	10.61	14.42	14.92	1.14	.75	2.69	1.60

* 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 July 7, 1923, July 5, 1924, July 4, 1925, and July 3, 1926; Vancouver figures are for weeks ending one day earlier. (Beginning October 1, 1926, figures are for receipts at both Vancouver and Prince Rupert Island.)

TABLE III.—WEEKLY VISIBLE SUPPLIES OF WHEAT IN NORTH AMERICA, UNITED KINGDOM, AND AFLOAT, AUGUST–DECEMBER 1926*

(Million bushels)

Date	United States	Canada	U. K. ports	Afloat	Total	Date	United States	Canada	U. K. ports	Afloat	Total
Aug. 7	47.3	28.0	4.8	40.1	120.2	Oct. 9	84.4	54.2	5.2	36.0	179.8
14	60.4	25.7	5.2	39.2	130.5	16	82.9	62.0	5.2	34.2	184.3
21	68.1	22.3	6.0	38.6	135.0	23	80.8	71.3	4.9	35.8	192.8
28	69.9	19.3	6.4	32.2	127.8	30	81.2	87.9	3.8	37.8	210.7
Sept. 4	72.9	19.4	5.9	35.7	133.9	Nov. 6	82.1	96.6	3.9	38.0	220.6
11	76.9	20.8	6.6	34.2	138.5	13	82.7	105.8	4.4	39.8	232.7
18	81.4	23.9	6.4	35.1	146.8	20	81.4	112.2	4.8	41.1	239.5
25	83.4	36.1	6.4	34.4	160.3	27	81.3	114.7	4.4	38.7	239.1
Oct. 2	84.7	46.6	5.3	35.4	172.0	Dec. 4	78.9	116.1	...	....	.....

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

TABLE IV.—WORLD VISIBLE WHEAT SUPPLIES, DECEMBER 1, 1920–25 AND MONTHLY, AUGUST–DECEMBER 1926*

(Million bushels)

Date	United States	Canada	Argentina	Australia	United Kingdom	Afloat	North America	Argentina, Australia	U.K. and afloat	Grand total	Total ex-Australia
1920 Dec. 1	92.2	51.9	.1	6.5	31.6	36.6	144.1	6.6	68.2	218.9	212.4
1921 Dec. 1	107.9	76.6	3.1	6.7	11.1	42.4	184.5	9.8	53.5	247.8	241.1
1922 Dec. 1	125.4	89.3	2.9	10.0	4.5	56.2	214.7	12.9	60.7	288.3	278.3
1923 Dec. 1	139.2	110.5	2.9	1.0	7.8	51.8	249.7	3.9	59.6	313.2	312.2
1924 Dec. 1	168.7	77.1	4.4	2.0	14.3	59.2	245.8	6.4	73.5	325.7	323.7
1925 Dec. 1	109.6	104.5	3.7	.7	3.8	35.1	214.1	4.4	38.9	257.4	256.7
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	3.8	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
Average, Dec. 1											
1910–14	111.7	35.2	.5	.6[a]	18.6	36.0	146.9	...	54.6	.....	202.0
1920–25	123.8	85.0	2.9	4.5	12.1	46.9	208.8	7.4	59.0	275.2	270.7

* 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.

[a] Australian figure for one year only.

TABLE V.—OCEAN CARGO FREIGHT RATES ON WHEAT AND CORN, WEEKLY FROM MAY 1926*

(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
May 7..	8.4	5.3	6.1	8.6	18.5	10.7	9.8	17.6	10.7	7.8
14..	11.4	6.8	7.6	9.9	18.9	10.4	9.8	17.9	11.5	7.8
21..	10.6	7.6	7.6	8.4	19.5	10.6	8.8	17.9	10.7	8.1
28..	9.9	6.8	7.6	8.4	19.9	10.8	8.8	17.9	10.8	8.1
June 4..	9.9	5.3	7.6	N.Q.	19.6	10.8	10.4	16.3	10.8	7.8
11..	9.9	6.1	8.4	N.Q.	18.7	10.8	10.8	16.3	10.8	7.8
18..	9.9	6.1	8.4	N.Q.	17.9	12.1	13.4	N.Q.	10.9	8.1
25..	10.6	6.8	9.1	N.Q.	19.6	13.7	14.0	N.Q.	10.4	8.5
July 2...	10.6	6.1	9.9	N.Q.	19.6	14.3	13.7	N.Q.	10.4	8.5
9..	10.6	6.1	9.9	N.Q.	19.5	15.5	13.0	N.Q.	10.4	8.5
16..	10.6	6.1	9.9	N.Q.	19.5	17.9	12.7	24.4	10.7	8.8
23..	10.6	6.1	N.Q.	N.Q.	19.9	18.6	12.4	26.0	11.4	8.8
30..	10.6	6.1	N.Q.	N.Q.	20.4	16.6	12.4	26.0	11.1	9.1
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...	N.Q.	21.5	....	....	....	29.2	....	....	....	....
26...	19.7	19.7	....	....	....	30.8	....	....	....	....
Dec. 3...	16.7	15.9	....	....	....	29.2	....	....	....	....

* 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.

TABLE VI.—INTERNATIONAL TRADE IN WHEAT AND FLOUR, MONTHLY, JULY–OCTOBER 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[b]	2.2	2.6	.02[b]	3.50	1.45	.28	.43	.26	(.68)[a]
Sept.	29.3	13.2	.46[b]	1.6	2.1	.02[b]	3.54	2.27	...	.68	.34	(.84)[a]
Oct.	21.9	34.9	.77	1.5	1.8	.00	3.75	....	...	.11	.29	(.78)[a]

B.—NET IMPORTS

Month	Irish Free St.	United Kingdom	France	Germany	Belgium	Italy	Netherlands	Scandinavia	Switzerland	Czecho-Slovakia	Baltic States[c]	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	....	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	1.92	.71	1.47

* Data from official sources and International Institute of Agriculture.

[a] Net imports. [b] Gross, not net. [c] Finland, Esthonia, Latvia.

TABLE VII.—WEEKLY WHEAT AND FLOUR SHIPMENTS BY AREAS OF ORIGIN AND DESTINATION, AUGUST–NOVEMBER 1926*

(Million bushels)

Week ending	North America	Argentina, Uruguay	Australia	Russia	Danube	India	Other countries	Total	To Europe	To ex-Europe
Aug. 7	12.99	.74	.36	.14	.33	.49	.27	15.32	13.12	2.20
14	9.96	.58	.88	.14	.19	.42	.48	12.65	10.37	2.28
21	8.47	.51	.21	...	.36	.10	.56	10.21	8.77	1.44
28	6.81	.34	.26	.98	.11	...	.58	9.08	7.53	1.55
Sept. 4	14.60	.68	.42	.46	.16	.02	.72	17.06	14.45	2.61
11	8.03	.69	.42	1.16	.19	...	.68	11.17	9.13	2.04
18	11.52	.35	.23	.82	.13	...	.80	13.85	11.79	2.06
25	11.70	.29	.28	1.06	.36	.02	.72	14.43	11.89	2.54
Oct. 2	11.24	.08	.17	.60	.02	.03	.84	12.98	10.69	2.29
9	11.06	.40	.34	.61	.21	...	.81	13.43	11.52	1.91
16	9.93	.34	.31	.38	.13	.38	1.12	12.59	10.18	2.41
23	10.74	.22	.30	1.20	1.23	.04	1.08	14.81	12.48	2.33
30	10.68	.83	.27	2.08	.30	.11	1.07	15.34	13.29	2.05
Nov. 6	11.54	.05	.58	1.13	.45	.11	1.04	14.90	12.88	2.02
13	11.30	.36	.40	1.73	.74	.33	.96	15.82	14.09	1.73
20	11.40	.26	.17	.90	.31	.31	.96	14.30	12.03	2.27
27	11.41	.27	.14	2.02	.14	...	.92	14.90	12.11	2.79

* 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 VIII.—WEEKLY CASH PRICES OF REPRESENTATIVE WHEATS IN LEADING EXPORTING AND IMPORTING MARKETS, AUGUST–NOVEMBER 1926*

(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 Rosafe	Australian
Aug.	1.35	1.33	1.67	1.63	1.53	1.43	1.63	1.78	N.Q.	N.Q.	1.59	N.Q.	1.75
	1.33	1.32	1.64	1.64	1.52	1.39	1.61	1.75	1.66	N.Q.	1.59	N.Q.	1.74
	1.33	1.30	1.57	1.56	1.53	1.39	1.60	1.70	1.63	1.73	1.59	N.Q.	1.73
	1.32	1.31	1.56	1.60	1.48	1.34	1.60	1.66	1.61	1.65	1.58	N.Q.	1.70
Sept.	1.33	1.31[a]	1.48	1.39	1.46	1.31	1.58	1.62	1.58	1.61	1.56	1.60	1.64
	1.34	1.28	1.45	1.35	1.43	1.30	1.57	1.65	1.51	N.Q.	1.50	1.59	1.64
	1.36	1.32	1.50	1.42	1.43	1.32	1.62	1.72	1.57	N.Q.	1.56	1.62	1.65
	1.37	1.33	1.51	1.39	1.44	1.36	1.64	1.68	1.60	N.Q.	1.59	N.Q.	1.65
Oct.	1.40	1.37	1.52	1.43	1.44	1.38	1.65	1.71	1.61	1.71	1.60	1.64	1.63
	1.39	1.37	1.53	1.42	1.39	1.31	1.64	1.67	1.62	1.67	1.63	1.67	1.66
	1.39	1.37	1.53	1.45	1.41	1.34	1.62	1.74	1.65	1.74	1.64	1.65	1.68
	1.41	1.40	1.53	1.53	1.51	1.44	1.63	1.88	1.70	N.Q.	1.76	1.69	1.83
	1.41	1.41	1.53	1.61	1.47	1.38	1.64	1.84	1.79	1.79	1.79	1.72	1.80
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	....	....	1.71	....	....	1.69	....
	1.34	1.36	1.44	1.60	1.39	1.29	....	....	1.66	....	....	1.61	....

* 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.

[a] Calculated to include quotation of $1.41 for September 1, which is apparently erroneous.

TABLE IX.—MONTHLY PRICES OF DOMESTIC WHEAT IN EUROPE*

(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	1.73
Nov.	1.56	1.45	1.62	1.71	1.37	1.96	1.83	1.99	2.20[a]	1.37	1.49	....
Dec.	1.54	1.60	....	1.77	1.33	....	1.94	2.12	....	1.44	1.62	....
Jan.	1.66	1.60	....	1.87	1.39	....	2.21	2.17	....	1.64	1.61	....
Feb.	1.74	1.54	....	1.89	1.42	....	2.31	2.16	....	1.63	1.60	....
Mar.	1.70	1.51	....	1.87	1.39	....	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[b]	....
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] Average for two weeks.

[b] First half of May.

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	26.5	35.6	59.6	57.2	59.1	41.2	36.2	28.4
New crop	862.6	700.0[a]	832.3	278.0[a]	437.8[a]	405.8	191.1	191.1	215.3	164.6	113.4	154.0
Total supplies	968.8	786.4	892.5	323.2	464.3	441.4	250.7	248.3	274.4	205.8	149.6	182.4
Seed requirements	87.6	83.3	85.0	38.5	40.0	41.0	23.1	} 94.8	73.0	9.4	9.4	9.4
Consumption	484.6	510.0	505.0	42.1	42.0	42.4						
Feed and waste	55.5	39.5	50.0	24.0	22.6	25.0	47.3			36.6	34.6	36.0
Stocks at end	86.4	60.2	82.5	26.5	35.6	43.0	57.2	59.1	61.4	36.2	28.4	42.0
Total deductions	714.1	693.0	722.5	131.1	140.2	151.4	127.6	153.9	134.4	82.2	72.4	87.4
Net exports	254.7[b]	93.4[b]	170.0[b]	192.1	324.1	290.0	123.1	94.4	140.0	123.6	77.2	95.0

* Data for 1924–25 and 1925–26 summarized from Appendix Table XXI in WHEAT STUDIES, December 1926, III, 137, which gives certain qualifying notes.

[a] Food Research Institute approximation used in preference to official estimate.

[b] Including shipments to possessions.

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