WHEAT STUDIES

OF THE

FOOD RESEARCH INSTITUTE

VOLUME II NUMBER 6

THE WORLD WHEAT SITUATION

DECEMBER 1925 TO MARCH 1926

STANFORD UNIVERSITY, CALIFORNIA

May 1926

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WHEAT STUDIES

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These surveys are supplemented by intensive studies bearing on the appraisal of the wheat situation and outlook and upon related matters of national policy. Typical subjects are indicated in the list of studies shown on the fourth cover page of this issue.

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SUMMARY

Uncertainty regarding the Argentine crop—in quantity as well as quality—has been an outstanding feature of the period under review. Latest official reports (April) indicate a crop of 191 million bushels, of light weight and low average quality, including probably at least 20 million bushels of unmillable grain. This is in line with the most pessimistic earlier predictions, and is 44 million bushels below the November 13 forecast and 80 million below trade expectations of early November. Substantial reductions, long since anticipated, have at length been made in Russian crop estimates. Official reductions in estimates of American and Canadian crops, however, are not yet accepted as accurate. German crop estimates have been raised, and generally trade reports that European crops were overestimated have not been confirmed. Despite the reductions in estimates, 1925–26 world crops are the largest since 1915, if Russia is included, and, excluding Russia, the largest except in 1923.

International trade has been light, but of normal dimensions with reference to the year as a whole. Surpluses genuinely available for export have been small except in Canada, which has furnished over half of the total exports. Especially in soft wheats the shortage has been pronounced. Germany and Poland have exported unusually large quantities, though small in the aggregate. North Africa, Russia, and the Danube countries have exported little. The United States has exported little except of durum wheat and of flour, but has imported for consumption only moderate quantities of Canadian wheat. Australia has shipped promptly from her small surplus of excellent wheat. Argentina has shipped slowly from her moderate supply of low quality wheat. The international position has been somewhat tight, but weakness in European demand has prevented greater tension. Europe, favored by large domestic crops, has bought from hand to mouth. Ex-European importers, however, have purchased heavily.

Visible supplies in the United States, afloat, and in importing markets have been very low; in Canada, large, though not in proportion to the crop. Country stocks have run low in leading export countries except Canada and Argentina, but in Europe are of fair size.

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Wheat prices fluctuated radically in December, chiefly as a result of conflicting reports from Argentina and the reduced estimate of the American crop. From late in December the price trend was generally downward until March, chiefly because, with light European demand and heavy shipments from Canada and Australia, import requirements were met with decreasing difficulty. Abnormal price relations have been noteworthy. Cash wheat has generally been at a premium over futures, notably in the United States. American prices of representative wheats have been close to or even above Liverpool prices, whereas they are normally much below. Prices in Continental European countries have varied greatly, and by no means closely with the international level, as a result of quality differences, local surpluses, variations in rate of marketing, and the operation of tariff duties. New crop futures in North America have been selling at unusually heavy discounts under the May future, reflecting expectations that the new harvests will relieve the tightness that has prevailed since November.

Although somewhat reduced acreage was sown last autumn, the outlook for the next harvests of winter wheat is quite promising in North Africa, Europe, and the United States except in American states producing soft red winter wheat; but a mediocre crop is apparently being harvested in India. North American spring-wheat crops, however, have not made a very promising start. Information to date suggests a much increased total crop in the United States, with an especially large yield of hard red winter and Pacific wheat, but in most countries of the Northern Hemisphere somewhat smaller crops than the excellent harvests of 1925. But it is much too early to make reliable predictions.

Over the next few months, international trade, prices, and carryovers will be materially influenced by changing prospects for the growing crops. Present indications are that the tightness of the international wheat position has been exaggerated, and that trade will continue fairly light for the rest of the season, with moderate purchases by Europe and ex-European countries and some relaxing of the supply tension. Unless growing crops of winter wheat suffer material reverses, price declines from the mid-April level seem more probable than advances, except in certain countries on the continent of Europe. Present conditions point to the probability of unusually low carryovers in the United States, Australia, afloat, and of import wheat in Europe; and to moderate carryovers of native wheat in most of Europe, in Canada and Argentina.

Apart from new crop developments, the principal uncertainties in the immediate outlook concern the true size of the 1925 crops in Canada and the United States, and the development of exports from Russia and the Danube basin.

I. SUPPLY AND DEMAND FOR THE CROP YEAR

World Supplies

The salient facts respecting wheat supplies and requirements for the crop year as a whole furnish the background for a discussion of the developments during the four months ending with March 1926.

The world wheat harvest of 1925 was about 3,900 million bushels, the largest since 1915, well above the pre-war average, and some 480 million bushels larger than in 1924. It was supplemented by excellent crops of rye, notably in Europe; a large crop of corn, notably in the United States; good crops of potatoes in Europe; and fairly good crops of fodder grains and roots. The world wheat crop outside of Russia fell about 175 million bushels short of the bumper crop of 1923, but substantially exceeded pre-war records and post-war averages. (See Table 1 and Chart 1.) The significance of the large crop, however, was greatly modified by its geographical distribution, considerations of quality, and the small size of the preceding crop.

The wheat crops of 1925 were relatively large in Russia and Canada only, among leading exporters; in Chile, North Africa,

and the Danube basin, among minor exporters; and in European importing countries. The greatest increase occurred in Russia, where the wheat harvest, even at

and afforded for export only a moderate surplus consisting chiefly of durum wheat, Pacific wheat, and flour. The Argentine and Australian crops were both below the post-

TABLE 1.—WHEAT PRODUCTION IN PRINCIPAL WHEAT-PRODUCING AREAS, PRE-WAR AND POST-WAR*

(Million bushels)

Year	World ex-Russia	Russia	Northern Hemisphere ex-Russia	Southern Hemisphere	United States	Canada	British India	North Africa	Europe ex-Russia	Japanese Empire	Australia	Argentina
1919	2,794[a]	...[b]	2,493[a]	301	968	193	280	75	919[a]	41	46	217
1920	2,893	318[c]	2,543	350	833	263	378	63	947	41	146	156
1921	3,109	205[c]	2,733	376	815	301	250	99	1,216	40	129	191
1922	3,163	242[c]	2,809	354	868	400	367	76	1,044	39	109	196
1923	3,489	330[c]	3,063	427	797	474	372	107	1,261	35	125	247
1924	3,081	331[c]	2,676	405	863	262	361	85	1,057	36	164	191
1925	3,314	577[c]	2,961[a]	354[a]	669	411	325	110	1,393[a]	40[a]	107	191
Average 1909–13	3,005	759	2,725	280	690	197	352	92	1,348	32	90	147
1920–24	3,147	285[c]	2,765	382	835	340	346	86	1,105	38	135	196

* Excluding China, Turkey in Europe, Brazil, and a number of small producers. Data of U.S. Department of Agriculture, except for Russian data and a few supplemental estimates.

[a] Partially estimated.

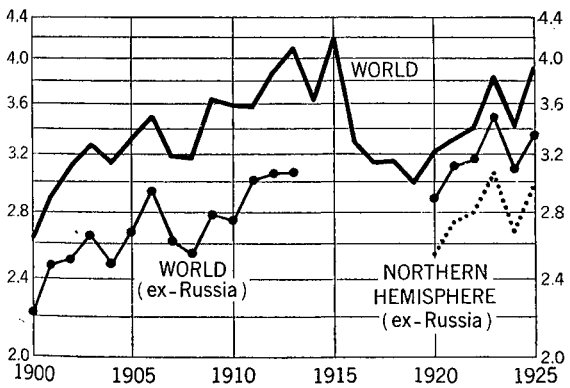
[b] Data not available.

[c] Including Siberia and Kirghisia, but not complete for Asiatic Russia.

reduced figures, is estimated at 577 million bushels, nearly 250 million larger than in 1923 and 1924; but this increase has proved to have little significance for the world market. Canada harvested the second largest

CHART 1.—WORLD WHEAT PRODUCTION, 1900–25*

(Billion bushels: logarithmic vertical scale)



* Estimates of U.S. Department of Agriculture. See especially *Agriculture Yearbook, 1924*, p. 569; *Foreign Crops and Markets;* and unpublished data. For Russia, 1920–25, official figures reported by International Institute of Agriculture.

crop in her history, one at least 150 million bushels larger than in 1924. India had a crop barely sufficient for domestic needs. The United States crop was distinctly small,

war average. Europe, however, harvested by far the best crops of wheat and rye since the armistice, each over 300 million bushels more than in the preceding year and together about equal to the joint pre-war average.

The wheat crops were generally of fairly good quality, with certain notable exceptions. Wet weather at harvest time lowered the grade of much Canadian wheat, which had promised to be unusually excellent, but did not seriously injure its milling quality. The official estimate of unmerchantable grain and loss in cleaning, etc., is smaller even than last year, and an unusually small percentage of the crop. (See Appendix Table II.) The crops of the Danube basin were of unusually low average quality, partly as a result of rains during harvest. Part of the French crop was similarly injured. In Argentina the quality of the wheat of the northern provinces (Santa Fé, Cordoba) was exceedingly poor, much of it unmillable, in consequence of early frosts, imperfect maturation, rust infection, and bad harvest weather. The wheat of the southern provinces, which promised to be much better, has proved nevertheless of mediocre quality. Uruguay's crop is reported large but poor. Australia's small

crop was of unusually high quality, the best, indeed, since 1915.

Under the joint influence of small domestic crops in 1924, high prices of import wheats, and good prospects for 1925 crops, the carryovers into 1925–26, especially of domestic wheat, were unusually small in most countries of Europe, and in Russia and the Orient.[1] Hence substantial but indeterminable quantities of the good crops of 1925 were required to replenish reserves in these countries. Carryovers in export countries, however, were on the whole of average size or larger.

Despite the large world crops, the international position of wheat has been fairly tight. On paper both Russia and the Danube countries had large export surpluses, but little of these became available in the autumn and winter, and the supplies really available for export during the year as a whole still promise to be small. Canada has had the only large available exportable surplus. In the late summer and early autumn, export supplies were available in limited quantities from old-crop wheat in North America, Argentina, and Australia, and from new-crop wheat in the United States, North Africa, Russia, and Hungary. Late in the autumn Canada was able to ship heavily from her new crop, and during the early winter Canadian wheat was the principal resource for importers. Poland and Germany were able to export quantities which, though absolutely small, were substantial for countries that are normally net importers. The tightness of the international position was increased by the serious damage to the Argentine crop in the autumn, and was prolonged by the delay in Argentine shipments because the early crop had suffered most and part of the later crop was held up by harvest rains. Early shipments from Australia afforded some relief.

Since the latter part of December the supply situation, for the year as a whole, has not changed materially. Most of the revisions of official crop estimates have been downward, but the major changes were already known or discounted when we prepared our previous survey in December last. In the autumn it was realized that crops in Russia and probably in the Danube basin had been somewhat overestimated and the export surpluses grossly exaggerated. In February the Russian wheat crop estimate was reduced from 661 to 577 million bushels, and the rye estimate from 820 to 768. Definitive figures for the Danube states are not yet available. The revision in the United States crop, on December 17 estimated as 669 million bushels, indicated a reduction of 28 million from the October 1 estimate. The Canadian crop, forecast on October 31 as 422 million bushels, was finally estimated in January as 411 million (first announced as 417 million but later adjusted). In Europe the principal change was the increase in the German estimate, early in January, from 107 million bushels to 118.

The most radical changes in crop estimates have been in the Argentine crop, which has been unusually variable in yield and quality, and accordingly difficult to estimate. Early in November a bumper crop of perhaps 270 million bushels was confidently expected by many in the trade. The first official forecast, published November 13 after damage was realized, was 235 million bushels. The second official forecast, published in mid-December, was 215 million. Private estimates have been generally lower, but the revised estimate of 191 million, published on April 10, was in line with the lowest figures suggested by the trade. This would indicate a reduction of 44 million bushels from the first official forecast, and of about 80 million bushels from the expectations current early in November. Since perhaps 20 or 30 million bushels are regarded as virtually unmillable, the reduction in Argentina's effective surplus is still greater. Although the greater part of this reduction was discounted by mid-December, uncertainty regarding the Argentine crop has been a persistent factor in the market throughout the period under review.

In lesser degree the Australian crop disappointed expectations. Early in December the trade figured on a crop of 124 million bushels. The first official forecast, published in November, was 99 million. This was revised early in December to 100, in

[1] This was apparently not the case in France, nor in Germany for imported wheat.

January to 110, and in February to 107 million bushels.

Possible Errors in Crop Estimates

The current official estimates of crops, which are shown in our tables and underlie the discussion above, are by no means beyond question. In view of the apparent tightness of the international wheat position, it is pertinent to scrutinize certain important estimates which may prove inaccurate.

The Canadian crop estimate in particular appears too conservative. For the prairie provinces the official estimate is 383 million bushels. Yet farmers' deliveries to country elevators from August 1, 1925, to April 2, 1926, were officially reported as 340 million bushels, and at a conservative estimate 50 million bushels must be allowed for farm seed, feed, and waste in this area. Farm stocks on August 1 were officially estimated as 2.7 million bushels, and it is unlikely that they were materially underestimated. Even if one allows for some purchases of seed wheat from seed specialists, acceptance of the official estimate would imply that the entire marketable supply had left the farms by April 1, leaving nothing for further deliveries and farm carryover.[1] This conclusion seems untenable. Farm stocks on March 31 were officially reported as 51 million bushels, and grain continues to move from the farms. The inference is that the official estimate may understate the crop by perhaps 20 to 30 million bushels.[2] The *Manitoba Free Press* estimate, it may be noted, is only 5 million bushels above the official estimate; but the Northwest Grain Dealers Association estimates the crop of 1925 of the prairie provinces at 425 million bushels, 42 million above the official. The actual figure probably lies between these estimates. It may be added that the Dominion Bureau of Statistics, in a bulletin issued April 15 giving stocks as of March 31, states that on the basis of estimated stocks the exportable balance appears 10 million bushels larger than the quantity calculated from the production estimate. W. Sanford Evans, a well-known Canadian authority, reckons the total crop as 20 million bushels above the official estimate.

The December reduction in the estimate of the American crop by 28 million bushels cannot yet be accepted as final. Unfortunately we have no such check on the crop as the Canadian figures of farm deliveries furnish for the prairie provinces, but a check-up in the state of Washington indicates a crop about 7 million bushels above the official estimate.[3] With coarse grains cheap, doubtless farm uses of wheat have been low and the outward carryover will be reduced; but actual developments seem difficult to reconcile with a crop estimate as low as 669 million bushels. The domestic flour trade has been amply supplied, and mill stocks of wheat outside of country stocks and the visible were about 94 million bushels on December 31[4]—a surprisingly large figure in the face of a small crop and reverse carrying charges.[5] Mill grindings from July through January of the present season were about 11 million bushels less than in the same period of 1924–25,[6] but since flour exports have been over 3 million barrels less, milling for domestic use was apparently larger than in the same period of last year. Net exports of wheat and flour to March 31 (64 million bushels) also seem large for a crop and carryover no larger than officially estimated. The earlier figure

[1] Compare the following figures for the past three crops, in million bushels:

Crop estimates:	1923	1924	1925
Dominion Government	452	236	383
Manitoba Free Press	453	268	388
Northwest Grain Dealers Association	428	247	425
Allowance for seed, farm feed, loss and waste	50	50	50
Stocks on farms, March 31	71	39	51
Farmers' deliveries to country elevators and platform loadings:			
August 1 to about April 1	376	198	340
August 1 to July 31	402	215	...

[2] A similar disparity appears in the corresponding figures for the crop of 1924. See Wheat Studies, I, 158; II, 4–5, 27, 61.

[3] *Commercial Review*, Portland, Oregon, April 6, 1926.

[4] See below, pp. 217–8.

[5] I.e., cash wheat at a substantial premium over the May future. See below, p. 221.

[6] Adjusting the census report of mill grindings July–January of each year to allow for unreporting mills, we have 354 million for 1924–25 and 343 million for 1925–26, exclusive of small merchant mills and custom mills for which a further allowance of at least 2 per cent should be made.

of 697 may conceivably prove to be as close to the truth.[1]

Some competent observers feel confident that several European crops were overestimated in 1925 and underestimated in 1924; but thus far evidence of substantial overestimates has not been convincing. The revised estimate for France will not be published until May; but information from our correspondents indicates that it will not differ materially from the provisional estimate, and may be slightly larger. The German estimate is regarded by competent German observers as fairly accurate except in so far as all the estimates of recent years have been too low because of underestimates of acreage.[2] Nothing has developed to indicate that the bread-grain resources of Europe are materially lower than official estimates suggest.

On the whole, however, it seems fair to conclude that the final figures for world crops will not be far from those now accepted; and that exporting countries as a whole probably have more rather than less than is indicated by current official figures.

Importers' Requirements

From the international point of view, it is essential to consider importers' requirements and exportable surpluses: these, rather than total demands and supplies, are determining factors in world prices. European and ex-European importing countries require separate consideration.

In our previous survey (December 1925, II, 88–93), we presented a reasoned estimate that European importing countries would require net imports of 500 million bushels in 1925–26. The considerations underlying this estimate need not be repeated here; but we desire to emphasize our point that high prices for import grain make for substitution and other economies in Europe to an extent which the trade has not fully appreciated. We consider our previous estimate as liberal rather than conservative, but on the whole regard it premature to suggest minor revisions. Table 2 compares our December estimate with available estimates by other authorities. Broomhall has not revised his detailed estimates for net imports. His estimate of Europe's import requirements stood at 552 million bushels until December 8, when it was reduced to 536. On March 30 he reduced it again, to 516. In the light of these facts, it appears that our December estimates are in line with current estimates by experienced observers. Even with a low volume of imports, Europe as a whole will have larger supplies of bread-grains than usual and much more than in 1924–25.

General expectations, however, have been higher. The market comment in the North American press during the winter has dealt largely with failure of expected import demands. Over and over again the short crops of Argentina and Australia were emphasized; rarely the large crops of Europe. Exaggerated importance was attached to the failure of roseate prophecies of Russian deliveries and the predicated reduction of the American crop to a domestic basis; there was far less comment on the large crop of

Table 2.—Forecasts of Wheat Imports by European Importing Countries, 1925–26

(Million bushels; crop year ending July 31, 1926)

Importing area	F.R. Inst. Dec.	U.S. Dept. of Agric.[a] Jan.	Sir J. Wilson Mar.	Broomhall Oct.
British Isles	230	230–247	224	232
Italy	40	30–50	40	56
Germany	40	35–50	48	56
France	16	15–30	24	32
Belgium	39	38–42	40	38
Netherlands	26	25–30	28	24
Scandinavia	22	19–25	24	18
Switzerland	15	14–17	16	16
Austria	16	14–18	16	16
Czecho-Slovakia	20	18–22	20	18
Baltic States	6	4–5	..	4[b]
Spain and Portugal	..	.....	..	4[c]
Greece	20	18–22	24	16
Others	10	15–20	8	6
Total	500	475–578	512	535[d]

[a] Crop year ending June 30, 1926.
[b] Finland only.
[c] Portugal only.
[d] See statement in text.

[1] The reduction was due in part to adjustments indicated by the 1925 census of agriculture, but there are grounds for questioning whether the census secured a comprehensive record.

[2] See Wheat Studies, I, 17, 44, 291–2; II, 23.

Canada. Indeed, in general the market has been, so to speak, petulantly asking, week after week: Why does not Europe import more, and when are the expected larger importations to begin? To a surprising extent the European capacity for economies has been left unmentioned in the wheat market commentaries that run daily in American newspapers. Broomhall, who has adverted frequently to the possibility for economies, has nevertheless shared the prevailing sentiment, and has only recently (March 30) reduced his estimate of European import requirements by a substantial amount.

In December we estimated ex-European requirements for the year at a maximum of 120 million bushels, well below the then current estimates of other observers, some of whom have since increased their figures in view of the rate of export during the fall and winter. This estimate is peculiarly difficult to make with assurance, or to check against actual results. The continuance of heavy shipments to ex-Europe during the winter was due in part to the effort of Japanese importers to stock up in advance of increase in the tariff (finally made effective March 29); this factor at least will operate to reduce later shipments. Consequently we question whether the movement to ex-European destinations will continue at the same rate during the last third of the year. Nevertheless, we regard our earlier estimate as too conservative and suggest a figure of 140 million bushels as a more reasonable approximation. Broomhall, who early in the season suggested a low figure of 96 million bushels and raised it early in December to 120 million, revised it on March 30 to 140 million bushels. Sir James Wilson still adheres to his November estimate of 168 million.

In the light, therefore, of the known facts and the probabilities respecting unknown elements in the situation, we suggest a figure of 640 million bushels as a forecast of net import requirements of importing countries during the crop year. Comparable estimates of Sir James Wilson and the International Institute of Agriculture are 680 and 625, respectively; and Broomhall's estimate of import requirements, not altogether comparable, is 656. The fulfilment of these requirements would imply moderate stocks of import wheat at the end of the crop year. The crop outlook to date supports the view that such a policy will be followed.

Estimated Net Exports

In our December survey we suggested as conservative figures for probable net exports the ones given in the first column of Table 3. With fuller information, we are disposed to consider the total approximately correct, but suggest in the second column a revision of the items.

Table 3.—Probable Net Exports, 1925–26

(Million bushels; crop year ending July 31, 1926)

Area	Food Res. Institute		Sir James Wilson[a]	Broomhall[b]
	Dec.	Apr.	Mar.	Mar. 30
United States...	55-65	75	48	80
Canada.....	300	310	312	304
Argentina.....	130	110	184	124
Other South America.....	5	3	8	...
Australia.....	60	65	72	64
India.....	..	4	..	30[c]
North Africa....	15	10	8	
Russia.....	26	24	40	24
Danube basin...	40	35	64	32
Poland.....	5	4	..	..
Total.....	636-646	640	736	658

[a] Available for export, not probable exports.
[b] Export shipments, not net exports.
[c] Including Chile.

The larger figure for the United States assumes a crop somewhat larger than the official estimate, a low carryover, and larger exports than usual in July. On the basis of 64 million net exports July–March, a total of 75 million bushels for the year ending July 31 seems conservative. Of durum wheat, to judge from the estimated crop and unofficial estimates of exports, some 15 million bushels were still available for export on April 1. Stocks of Pacific wheat are also considered large, and the indications are that the new crop there will be harvested early enough to permit exports in July.

The increase in our figure for Canada is made to allow for the recent low estimate of unmerchantable grain and loss in

cleaning, etc., and assumes a low carryover unless the crop is underestimated. We regard the figure of 310 million bushels as especially conservative: the Dominion Bureau of Statistics now suggests a figure of 311, on the basis of the crop estimates, or 321 on the basis of estimates of stocks on March 31. The Argentine figure is reduced chiefly because of convincing reports that the crop is small and of very low average quality. The Australian figure is raised slightly in view of the prospect that Australia will export her surplus largely before July 31. Figures for India and Poland represent net exports to date. The other items have been lowered slightly in the light of actual and prospective exports, and also appear conservative. Moderate deviations from these suggested figures must be expected if new crop developments exert a material influence on importers' demands or the eagerness of exporters to sell. For comparison we give in Table 3 the latest estimates of other experienced observers—Sir James Wilson's for exportable surpluses, not probable net exports; and Broomhall's for probable shipments.

In giving our figures for importers' requirements and probable net exports, we do not imply that one can prophesy these with precision. If North American surpluses should prove to be materially underestimated and the new crop should develop so as to cause a sharp decline in prices, importers' requirements may well expand under selling pressure from both Northern and Southern Hemispheres. Or if European crops should prove materially overestimated and new crops here should promise to be late, poor, or both, a stress in adjustment may suddenly develop in May or June, and imports may then increase under buying pressure. At present the latter appears to us a less likely development than the former. Other conditions may cause net imports to fall below our suggested figures. The figures are presented merely as a reasoned approximation on the basis of known facts and an appraisal of imponderable influences affecting the next few months.

In view of the international trade up to March 31, the probability that North American crops are larger than officially estimated, and the new crop outlook, it seems that the trade has exaggerated the tightness of the international position, and that there is a fair margin of exporters' available surpluses over importers' requirements.

II. INTERNATIONAL TRADE, DECEMBER TO MARCH

In General

For reasons already stated, the volume of international trade in wheat and flour will be much smaller in the current year than in 1923–24, a year of exceptionally large crops, or in 1924–25, a year of crop shortage in Europe. In comparison with other years and with the probable total for the year, however, the movement to April 1 has not been small, especially since October. In the period under review it has been larger than it was in the first four months of the crop year. According to Broomhall (see Table 4), export shipments in the seventeen weeks from November 29 to March 27 were 235 million bushels, including international shipments within Europe.[1] This is 27 million bushels more than was shipped in the preceding seventeen weeks, and makes a total for the 34 weeks of about 67½ per cent of Broomhall's estimated shipments for the

[1] Weekly figures are given in Appendix Table VI.

Table 4.—International Wheat and Flour Shipments (Broomhall) by Destinations*

(Million bushels)

Year	December–March (17 weeks)			August–March (34 weeks)		
	Total	Europe	Ex-Europe	Total	Europe	Ex-Europe
1921–22	223.6	180.8	42.8	441.0	365.4	75.6
1922–23	225.9	196.0	29.9	444.7	385.2	59.5
1923–24	280.3	213.2	67.1	502.3	390.7	111.5
1924–25	272.2	242.3	29.9	527.2	470.6	56.5
1925–26	234.7	175.6	59.1	442.2	342.3	99.9
Average 1909–14	189.9	161.9	28.0	406.5	353.0	53.5

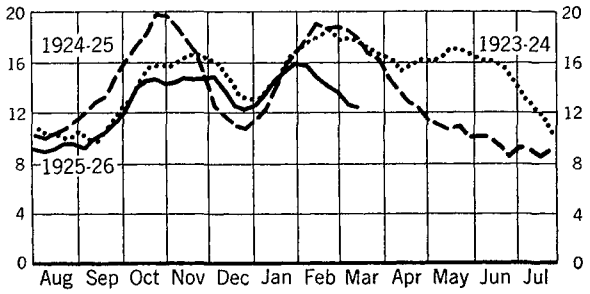
* Data from Broomhall's *Corn Trade News*. Includes 1925–26 shipments from Germany.

entire crop year. In other words, shipments are now slightly ahead of his schedule, instead of behind it as they were late in November. Shipments to Europe, however, have continued relatively small, while shipments to ex-European destinations have been relatively large. On March 30 Broomhall reduced his estimate of European import requirements and raised his estimate of ex-European requirements, each by 20 million bushels. (See Appendix Table VII.)

Chart 2 shows the course of international shipments in the present crop year, in comparison with those of the two preceding years, in a five-weeks moving average of Broomhall's weekly shipments. Certain facts are noteworthy. This year's shipments are on a lower level, because of the smaller

CHART 2.—INTERNATIONAL SHIPMENTS OF WHEAT AND FLOUR, WEEKLY, 1923–24 TO 1925–26*

(Million bushels: 5-weeks moving average)



* Data from Broomhall's *Corn Trade News*. German shipments included for 1925–26.

European demand and smaller surpluses in export countries as a whole. The autumnal peak was less pronounced, chiefly because of shortage in the United States and rainy harvest weather in Canada. The seasonal decline in December was less pronounced than usual, chiefly because of the large volume of Canadian shipments. The winter peak was reached late in January, earlier than usual because of prompt shipments from Australia; but the subsequent decline also began earlier on account of the smaller volume available from the Southern Hemisphere.

EUROPEAN NET IMPORTS

Available monthly data for net imports by European importing countries are given in detail in Appendix Table V. Germany's net imports were heaviest early in the season, largely before the tariff went into effect on September 1, and in December and January her exports exceeded her imports. France has imported little since her new crop became available.[1] Great Britain, however, imported much more heavily in December–January, Italy in November–January, and Czecho-Slovakia in October–December, than earlier in the season. Allowing for lags between purchases and imports, it would appear that the heaviest purchases of these countries (except possibly Italy) were made at prices well below the December peak.

Table 5 (p. 212) summarizes the net imports of leading importers in the seven months August–February, together with certain figures for comparison. It will be observed that, while net imports this year are generally below those of the same period of 1924–25, they do not differ greatly from the five-year average except in the cases of Germany, France, and Italy, which had large crops in 1925. Indeed several minor importers which produce less than they import have imported more than the average in the corresponding period of 1920–25. On the whole, the net imports run fairly close to seven-twelfths of our December estimates for the crop year.

In several countries imported wheats have consisted mainly of types or qualities needed to supplement domestic wheats. A considerable fraction of Germany's imports are required for mixing with German wheats to

[1] Statistics of imports into France have been confused by the operation of the law of December 30, 1924, which permitted refund of the duty on wheat under certain conditions, up to July 31, 1925. Imports of such wheat were not included currently in statistics of imports, but only with the totals for January–September, 1925. Revised figures made in the light of this information show that net imports by France in 1924–25 were 58.5 million bushels, and supplies available for domestic utilization 340 million bushels, and not, as we had previously stated (WHEAT STUDIES, December 1925, II, 56), 30.6 and 312, respectively. These figures would indicate that France had at least a normal supply of wheat in 1924–25, and are consistent with our information that her carry-over into 1925–26 was of fair size.

With the same information it appears that net imports into France in the first seven months of 1925–26 were only 8 million bushels. It now seems doubtful whether net imports for the rest of the year will exceed 5 million bushels. Our earlier estimate of 16 million bushels therefore appears liberal rather than conservative.

produce a flour of desired strength. Not because of inferiority in the 1925 crop but because of its usual characteristics, Germany has willingly exported her soft wheat and imported hard wheats. Imports of wheat into France, since the new crop became available, have been necessary not because of a quantitative deficiency in native wheat, but because of deficiency of quality. Perhaps half the French wheat consumption is

TABLE 5.—NET IMPORTS OF WHEAT AND FLOUR BY LEADING EUROPEAN COUNTRIES, AUGUST TO FEBRUARY*

(Million bushels)

Importing Area	Average 1920–25	1924–25	1925–26	7/12 of crop year estimate
British Isles[a]	121.0	141.0	122.4[b]	134.2
Italy	52.1	43.7	26.2	23.3
Germany	28.9	46.1	21.5	23.3
France	28.7	23.6[c]	8.1[d]	9.3
Belgium	23.3	23.7	23.7[b]	22.7
Netherlands	12.8	17.1	16.7	15.2
Scandinavia	11.0	14.5	11.6	12.8
Switzerland	10.5	9.9	9.7	8.7
Czecho-Slovakia	7.5	16.0	12.8	11.7
Baltic States[e]	...	4.5	5.8[b]	3.5
Total	295.8[f]	340.1[c]	258.5[b]	264.7

* Data from official sources and International Institute of Agriculture.

[a] Including Irish Free State.

[b] Partially estimated.

[c] Using International Institute of Agriculture data for France, which do not include wheat imported under decree of December 30, 1924.

[d] Figure adjusted on basis of information from our correspondent.

[e] Finland, Esthonia, Latvia.

[f] Excluding Baltic States.

furnished by local mills which do not ordinarily use import wheat for blending. Part of the crop, moreover, though in general it is light in weight, produced a satisfactory flour. But a considerable fraction, especially that which had sprouted, yields a flour satisfactory for bread-baking by the usual process only if blended with 10 or 15 per cent of hard wheat flour. In addition there are imports of wheats suited for the manufacture of alimentary pastes. A substantial fraction of Italy's imports have consisted of durum wheat for the same purposes.

Generally speaking, European importing countries have purchased import wheat on a hand-to-mouth basis, and have carried low stocks. This has been due to several factors. In most countries import wheat has been much higher in price than native wheat, as a result of the small world export surplus, large domestic crops, and considerations of quality. With large domestic supplies on tap, so to speak, there has been no occasion for panicky buying such as appeared in the autumn of 1924. On the other hand, exporters have had no inducement to press wheat upon the European market. The uncertainties regarding Russian exports and the Argentine crop created apprehensions respecting prices and diminished the willingness of importers to buy without hedging, and they resort to hedging only with great reluctance. The continued investigation into wheat and bread prices in Great Britain has apparently had some effect in cramping the operations of importing traders and their customers. The decline of French and Belgian francs and the Italian lira has tended to restrict imports, and, in the case of France, to stimulate exports of flour. Import tariffs have been effective, notably in Italy. Credit has been tight in several countries on the Continent, especially in Germany. Millers and grain dealers in particular have found themselves in no financial position to carry large stocks, and some who have done so (notably in Hungary) have suffered serious financial reverses. The abundance of rye, potatoes, and corn, available at very low prices as compared with wheat, has encouraged substitution of the cheaper products both as foods and feeds.

EX-EUROPEAN IMPORTS

Ex-European countries generally have imported much more heavily than last year, probably chiefly because of low stocks at the beginning of the year and the attractive prices of September–October; but the larger shipments have continued since the price advance of November. The Orient has taken heavy shipments from Vancouver and Australia, but little from Pacific American ports.[1] Broomhall's data on export ship-

[1] The disparity between Vancouver and Portland–Puget Sound prices has at times been striking.

ments to ex-European destinations (see Table 4, p. 210) show a total of 59 million bushels for December–March and of 100 million bushels for August–March. Both figures are larger than in any year except 1923–24, when exceptionally low prices and other factors led to extremely heavy purchases and accumulation of stocks.[1]

Unfortunately, monthly import data are available for few of these countries. Egypt's net imports in August–January were 6.8 million bushels, as compared with 4.4 million in the corresponding period of 1924–25; Japan's were 8.1 million as compared with 6.5 million last year. Heavy Japanese purchases have been due in part to rising exchange rates, which have cheapened imports in terms of Japanese money, but probably more largely to anticipation of higher tariffs. Agrarian interests sought to raise the tariff on wheat from 77 sen to 2 yen per 100 kin, while industrial interests opposed any increase. On March 8 an increase to 150 sen was agreed upon, and from the end of March it stands at about 30 cents per bushel.[2] Since millers naturally protected themselves by advance purchases, it may be expected that Japanese imports will be small from April onward.

Sources of Exports

Available details of export shipments and net exports by areas, given in Appendix Tables V and VI, are partially summarized, with comparable figures for earlier years, in Tables 6 and 7.[3] Chart 3 (p. 214) gives Broomhall's weekly shipments since August 1 in total and by principal export areas.

Canada has been the principal source of exports during the period, contributing, according to export statistics, roughly 116 million bushels, more than half of the total. Net exports in December were exceptionally heavy, nearly 62 million bushels. Exports in later months of closed navigation have been seasonally light, but by no means negligible.

[1] See Wheat Studies, December 1924, I, 32, 33, 40, 54.

[2] The flour duty was increased from 185 to 290 sen per 100 kin, or about $1.94 per barrel.

[3] For corresponding August–November figures, see Wheat Studies, December 1925, II, 75.

The United States has exported chiefly durum, Pacific wheat, and flour, to a total of 26 million bushels for the four months.

Table 6. — International Wheat Shipments (Broomhall) by Export Areas, December–March*

(Million bushels)

Exporting area	1909–13 average	1922–23	1923–24	1924–25	1925–26
North America	62.4	139.8	159.6	117.0	128.8
Argentina, Uruguay	32.1	53.0	55.9	63.9	33.1
Australia	26.2	24.8	33.3	60.3	41.3
Russia, Danube basin	58.0	1.5	25.6	12.3	7.6
British India	8.8	6.6	.6	15.0	....
Other countries	2.4	.2	5.3	3.6	23.9
Total	189.9	225.9	280.3	272.2	234.7

* Figures for 17 weeks, from Broomhall's *Corn Trade News*. Includes 1925–26 shipments from Germany.

Imports in bond from Canada for flour export have been some 4½ million bushels, and for domestic consumption about 548 thousand. Net exports have been about 21 million bushels, making a total of 64 million since July 1, or 55½ million since August 1.

Table 7.—Net Exports of Wheat and Flour from Principal Exporting Countries, December to March*

(Million bushels)

4-month period	Total	United States	Canada	Argentina	Australia	British India
Average 1909–14	133.2	29.8	30.9	34.0	28.4	10.1
1920–21	208.6	75.1	75.1	16.6	32.3	9.5
1921–22	206.0	46.3	65.8	54.3	51.5	(11.9)[a]
1922–23	221.2	47.9	84.3	56.7	25.0	7.3
1923–24	255.8	33.3	117.0	65.2	38.8	1.5
1924–25	266.8	62.5	61.9	65.0	60.0	17.4
1925–26	217.2[b]	21.2	116.4	34.1[c]	44.2[c]	1.3[d]
1925 Dec.	75.3	6.2	61.7	4.4	2.6	.4
1926 Jan.	43.8	4.0	16.4	6.1	16.7	.6
Feb.	48.8	4.2	17.8	12.1	14.4	.3
Mar.	49.3[c]	6.8	20.5	11.5[c]	10.5[c]	...

* Data from official sources and International Institute of Agriculture.

[a] Net import.

[b] March figure for India not yet available.

[c] March figure estimated from Broomhall's shipments.

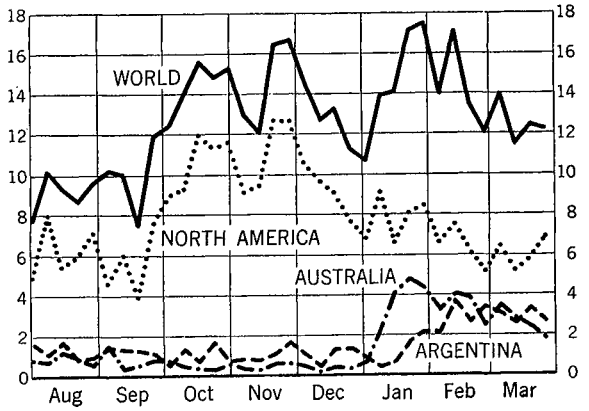
[d] December–February.

[e] Excluding India.

British India has practically ceased to export. Since she has imported some wheat from Australia, her net exports were negligible for the period. Shipments from North Africa have been light considering the size of the 1925 crops.

CHART 3.—INTERNATIONAL SHIPMENTS OF WHEAT AND FLOUR, WEEKLY, AUGUST TO MARCH, 1925–26*

(Million bushels)



* Data from Broomhall's *Corn Trade News*. German shipments included.

Argentine exports have been much lighter than usual at this season, chiefly because of delayed harvest and the heavy discount on wheat from the new crop. Australia, on the other hand, shipped heavily from her small crop in both January and February. A considerable proportion of new Australian wheat has gone to the Orient, New Zealand, and Egypt, some even to India and Brazil, rather than to Europe.

Russian exports, which practically ceased in November, were resumed on a small scale in January after roads had become passable, but the serious internal difficulties which caused the failure of the grandiose export plan have continued to operate. Peasants, left with depleted stocks at the beginning of the crop year, and unable to buy consumer's goods at acceptable prices, have held on to their grain. The Soviet grain-buying organization was inefficient and honeycombed with graft. Port facilities were very poor, and the export organization was most inefficient. Hence, despite the large crop of grain, collections and exports have been small.

The exports of Russian barley have been notable in contrast with those of wheat. Up to March 1, the unrevised figures for Russian exports were 15 million bushels of wheat, 4 million bushels of rye, and 25 million bushels of barley. Many vessels chartered for wheat have been loaded out with barley. This Russian barley replaces rye in Europe for animal feed, and to that extent represents an indirect import of bread grain. On the other hand, the relatively low price of rye in Europe would naturally favor the feeding of rye to domestic animals in central Europe.

The export trade of the Danube countries has been sluggish and surprisingly small in view of the size of the 1925 crops. The wet harvest delayed marketing and reduced the quality of the crops. Peasants have tended to hold their wheat for higher prices, and the export demand has been small for the lower grade wheat and flour which these countries have produced. Hungary has exported at a moderate rate and Jugo-Slavia more slowly. Roumania's export tax was practically prohibitive until its reduction in March, and still operates to restrict exports. Bulgaria has had little surplus for export, after providing for consumption and replenishing stocks. Transport conditions in much of this area have been unusually unsatisfactory.

POLISH AND GERMAN EXPORTS

A new element in the international wheat trade this year has been furnished by substantial exports from Poland, which is normally self-sufficing or at times a small importer of wheat and flour, and from Germany, which is a net importer. This year Poland has exported nearly 5 million bushels of wheat; Germany about 15 million, most of it between October and January.

Poland's exports were made from an unusually good wheat crop, which was supplemented by an excellent crop of rye. The resulting depression of wheat prices was intensified by credit stringency, affecting mill purchases, and by economic depression, which hindered expansion of domestic demand for wheat bread. At the same time, a heavy fall in the foreign exchange value of the zloty, caused by financial and eco-

nomic factors, stimulated exports by raising export prices in terms of Polish currency. Since foreign supplies of soft wheats were scarce, Polish wheat was welcome in European importing markets. Early in the winter it appeared that wheat exports had been excessive, a belief that the crops were overestimated gained currency, and a prohibitive export tax was imposed late in January.

In Germany also, good crops of wheat and rye were harvested, and financial stringency and industrial depression operated as in Poland, though domestic prices of wheat were not depressed so far.[1] Moreover, German farmers had borrowed heavily on short-time notes in the spring, and after harvest were forced to market their crops rapidly in order to meet their debts. The volume of German exports, though small in comparison with total world exports, has been a surprise to the trade, and has been by no means a negligible factor in the European market, especially in England and Italy. It was forthcoming when overseas exports of soft wheat were not available in large quantities. It consisted of low gluten wheat which could be blended to advantage with the abundant hard Canadian wheat. It came heavily on the market when prices were mounting skyward after news of the Argentine disaster. Though Germany will be a net importer for the year as a whole, December and January showed an export balance.

The expansion of German exports was greatly facilitated by the restoration, on October 1, 1925, of the pre-war drawback system, with certain modifications. Exporters of rye, wheat, spelt, barley, oats, pulse, flour, and other grain products may obtain import certificates (*Einfuhrscheine*) which entitle the holder to import within nine months, without payment of customs duties, any of these products except flour and barley (except for other uses than cattle feed) equal to the customs value of the import certificate.[2] Transportation considerations also were an important factor. Eastern wheat could be exported from ports on the Baltic and western industrial centers supplied by imports through the North Sea at a saving in transportation costs as compared with westward rail shipments within Germany.

III. VISIBLE SUPPLIES AND OTHER STOCKS

Visible Supplies

By contrast with the two preceding crop years, world visible supplies have been low throughout this crop year.[3] This is clearly shown by Chart 4 (p. 216), which shows weekly figures for the principal groups of items. Visible supplies were, however, exceptionally high in most of 1923–24 and in 1924–25. Comparison with less exceptional years shows that this year they have not been abnormally low. On the whole, they have been higher than in earlier post-war years, and much higher than before the war, when Canadian visibles bulked much smaller. This is clear from the more comprehensive tabulation as of April 1, given in Table 8.

The United States visible supply has, however, been conspicuously small this year, Bradstreet's figure never exceeding 60 million bushels. This is the natural conse-

Table 8.—Summary of Principal Items in World Visible Supplies*

(Million bushels)

April 1	United States	Canada	U.K. and afloat	Total
1920	95	28	71	194
1921	52	41	77	169
1922	69	63	72	205
1923	102	82	61	244
1924	111	123	74	309
1925	109	80	96	285
1926	82	99	54	235
Average 1910–14	84	38	66	187
1921–25	89	78	76	242

* Excluding Argentina and Australia. See Appendix Table IX for details and sources.

[1] See below, pp. 222, 236.

[2] Cf. *Foreign Crops and Markets*, March 29, 1926, for description and history of this system.

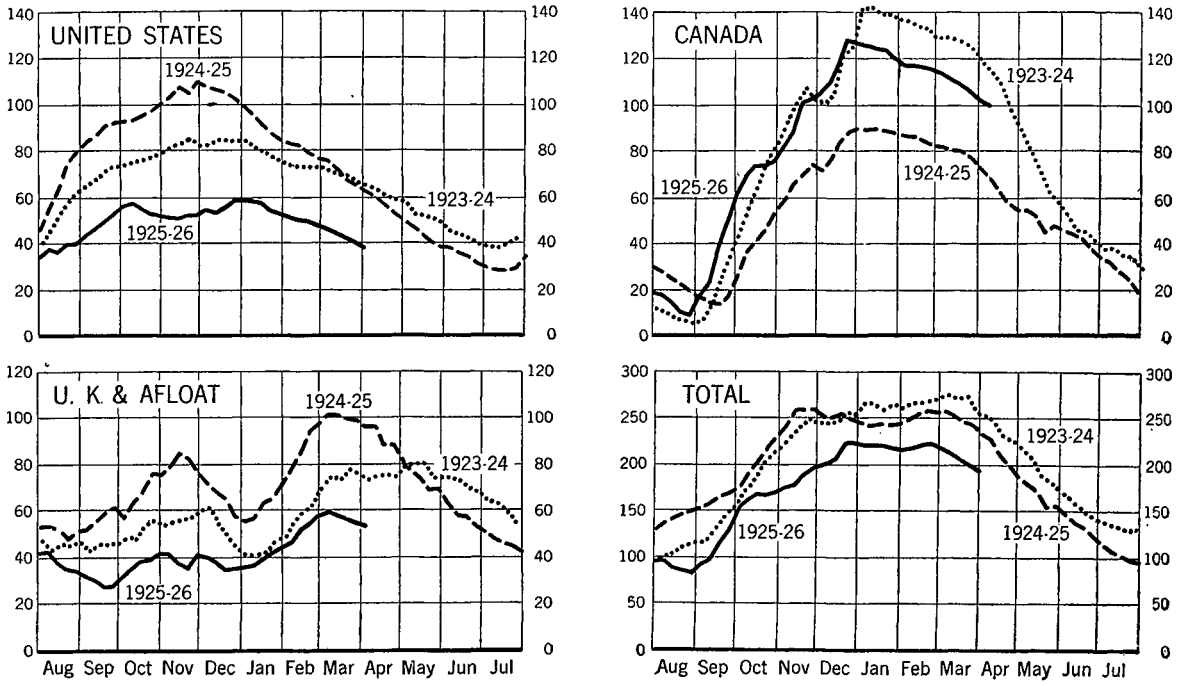
[3] See also chart in Wheat Studies, November 1925, II, 32.

quence of a small crop, marketed slowly, moving mostly to mills and private elevators rather than in considerable amounts into public elevators and export channels; and of the unusual relation between cash and futures prices.[1] Visible supplies have been largely owned by mills and farmers, not by terminal merchants. The low peaks were reached early in October, after heavy marketings of spring wheat, and early in January, after the December rise in price.

Restraint of farm marketing, low visible supply, and reverse carrying charges interact one upon the other. Because the crop is short and the visible supply is low, the farmer reasons that higher prices can be secured if he restrains his marketing. Because the cash stands at a premium over the May future, terminal merchants refuse to buy wheat against a hedge and confine themselves to what is little more than brokerage, declining their historic function as carriers of wheat through the winter. Because the visible is low, millers feel forced to make purchases that they would otherwise decline in the face of reverse carrying charges, even while fearful that they may be compelled to make or accept deliveries on their hedges. Nevertheless, the grinding of mills proceeds at a normal pace. The position of the mills is very much that of a mail carrier who has to make a route every day: he makes the route rain or shine, but would prefer to have good weather. The mills carry on, but they would prefer to do it without worry, under normal conditions of farm marketing, visible supply, and position of cash and futures prices. Millers have not worried about getting grain enough to grind, but labor under difficulties attending operations under reverse carrying charges and those encountered in securing premium wheats when hedging is abnormal. To judge by this year's experience, if and when the country goes on a domestic wheat basis, the trade problems will not be those of actual procurement of supplies as much as those of trading, since

CHART 4.—VISIBLE WHEAT SUPPLIES IN THE UNITED STATES, CANADA, UNITED KINGDOM AND AFLOAT, WEEKLY FROM AUGUST 1923*

(Million bushels)



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

[1] See below, pp. 220–1.

reverse carrying charges and withdrawal of terminal merchants from participation in the visible supply would probably become the rule.

The visible afloat and in Great Britain has also been smaller than usual, and far below the high figures of 1924–25. This is the consequence of reduced international trade; the great preponderance of Canadian shipments, which require less time for passage than Southern Hemisphere shipments; and the hand-to-mouth buying of European importers.

The Canadian visible, however, has been of normal size for such a crop, and much larger than last year. In the four months under review it has been high, as usual at this season of the year. It is the large Canadian visible that has maintained the total at fairly normal figures.

Country Stocks in North America

Official figures for country stocks are available only for the United States, as of March 1, and for Canada, as of March 31.

Like the visible supplies, country stocks of wheat in the United States on March 1 were the smallest in many years. (See Appendix Table X.) Farm stocks, estimated at 99 million bushels, were lower than in any previous year since estimates were first made in 1895. Stocks in country mills and elevators, estimated at 75 million bushels, have been lower in only two years (1917, 1925) since such estimates have been prepared (1910–26).[1] The combined country stocks represent 26.1 per cent of the preceding crop, as compared with a 1921–25 average of 28.4 per cent. Country stocks were relatively smallest, this year, in the surplus-producing states east of the Rocky Mountains.[2] It is impressive to note, however, that country stocks this year were only 5 million bushels less than on March 1, 1925, when low figures resulted from heavy marketing in the preceding autumn. This year's stocks are not especially low when the size of the crop is taken into account.

For Canada, the official estimate of stocks on farms on March 31 is 51 million bushels, as compared with 42, 55, 71, and 39 in the preceding years beginning with 1922. (See Appendix Table XI.) This figure is not large, in view of the size of the crop. But it must be noted that last year, when the estimated stocks were barely sufficient for spring seed requirements, the deliveries from the farms from April 1 to July 31 were about 17 million bushels and 2.7 million bushels were reported on farms on July 31. Other stocks at Canadian country points are considered small, but total stocks are estimated at 161.4 million bushels, as compared with 121.1 last year and 202.5 on March 31, 1924.

United States Mill Holdings of Wheat and Flour

The first census report on mill stocks of wheat and flour, as of June 30, 1925, indicated the existence of large stocks not included in visible supplies or country stocks. The second report, as of December 31, 1925, showed that these were much larger on December 31 than on June 30. Table 9 summarizes the figures as reported on these two dates. The first item is presumably included in country stocks otherwise reported, the second in estimates of visible supplies. The third item, for the most part, is not included in statistics of wheat stocks heretofore available. If we raise this figure to 100 per cent, on the crude assumption that the reporting mills are representative of all mills, we reach a figure of 30.6 million bushels for

Table 9.—United States Census Reports on Mill Stocks of Wheat and Flour, June 30, December 31, 1925

	June 30	Dec. 31
Percentage of United States wheat-flour output represented	87.4	88.0
Wheat stocks *(thousand bushels)*:		
In country elevators	2,158	7,554
In public terminal elevators	3,437	12,697
In private terminal elevators, in transit, and in mills	26,719	82,858
Total	32,314	103,109
Wheat-flour stocks in wheat equivalent *(thousand bushels at 4.6 bu. = 1 bbl.)*	15,396	21,088
Total wheat and flour as wheat	47,710	124,197

[1] *Agriculture Yearbook, 1924*, p. 570.

[2] Clement, Curtis & Co., *Circular*, March 3, 1926.

June 30, and of 94.2 million bushels for December 31. The wheat equivalent of mill stocks of flour was nearly 6 million bushels larger on December 31 than on June 30. Now it may safely be assumed that these stocks will be built down as the end of the crop year approaches. Indeed in view of the tight wheat position this year and the present favorable outlook for 1926 crops of winter wheat in this country, it is probable that these stocks will be lower on June 30, 1926, than on June 30, 1925. In other words, mill stocks of wheat and flour, not otherwise reported, contained on December 31 at least 70 million bushels that could be drawn upon during the next six months in addition to country stocks and visible supplies without reducing administrative stocks to abnormally low figures.

Southern Hemisphere Stocks

The exportable carryover of old crop Argentine wheat on January 1 was officially estimated at 19 million bushels,[1] an unusually high figure. Chile, which had been a net importer late in the year, and Australia, which had exported much more wheat in August–December (nearly 15 million bushels) than was supposed to have been available for export on August 1, presumably had no carryover of exportable wheat from the preceding crop. Because of the rapid shipments from the small crop, Australia's exportable surplus on April 1 was apparently not over 20 million bushels, almost entirely out of farmers' hands. Argentina, however, had a larger surplus than usual on April 1, in consequence of the high carryover and of retarded shipments. Chile also is reported to have a good crop, which may permit exports of 5 to 8 million bushels in 1926.

[1] *Corn Trade News*, January 19, 1926.

[2] In Germany, chiefly because of the depressed price of rye, there has been agitation for the revival of the Federal Grain Administration (*Reichsgetreidestelle*), with powers to acquire stocks of domestic bread grains to be released in the late spring and early summer. This proposal has not been adopted, but early in April the Reichstag passed a bill authorizing a loan of 30 million marks to a new private company whose avowed purpose is, in part, to stabilize prices by buying, storing, and selling grain. Cf. *Foreign Crops and Markets*, March 29, April 5, 1926, pp. 394–99, 435.

European Stocks

Concerning European wheat and flour stocks little is known with any approach to precision. Broomhall expressed on March 23 the view generally held by the trade:

> In most, if not all European countries, at the present time there are only small stocks of imported wheat, and it seems fairly evident, too, that native wheat in our own country, as well as in several Continental countries, is in moderate compass, having been drawn upon very fully throughout the whole season.

Reports from the Danube countries, however, indicate an abundance of native wheat and of flour, particularly of lower grades and qualities. Roumanian stocks in particular were reported large in March, before the export tax was reduced. Large amounts of wheat are said to be in peasant hands in Russia. Elsewhere, generally, stocks of native wheat are apparently moderate only by reference to the size of the preceding crop, and are larger than in many years at this season.

During recent months large British and continental mills have been shut down, or operated at greatly reduced capacity, on account of local gluts in the markets for flour and feeds, high mill stocks being accompanied by low port stocks of raw wheat. Whatever glut may exist in flour is, however, apparently due to trading considerations rather than to a plethora of stocks extending into bakeshops and homes. Additional factors also are operative in particular countries. In England, for example, the shut-down of mills has been due in part to agreement between millers and mill workers to close down instead of running on short time, in order that the workers may take the fullest advantage of existing regulations governing the issue of doles for unemployment. In some of the central European cities, notably in Budapest, the mills have involved themselves in a financial jam, made worse by clumsy attempts at speculation on the Chicago market, and have required governmental assistance in liquidation of stocks. So long as there is political as well as economic grinding of flour in Europe, the difficulties of flour millers there may be expected to continue.[2]

IV. WHEAT PRICES AND PRICE COMPARISONS

General Level of Wheat Prices

The general level of world wheat prices in the past four months, to judge from prices in leading import and export market centers, has been generally 50 per cent or more above the average for the five crop years 1909–10 to 1913–14. Considering the general level of commodity prices in terms of gold, wheat has had about the same purchasing power per bushel as on the average in the five pre-war years. It has been somewhat lower than in the corresponding period of 1924–25, after short harvests in most of the Northern Hemisphere; but it has been much higher than in 1923–24, when the world crop including Russia's was smaller than this year. This paradox is explained in large measure by the reduced quantities available for export this year, as compared with 1923–24, and the lesser reduction in import requirements. Considering the size of the world harvest, prices in the current year are high; but this year's experience proves that it is still premature to give great weight to increased production and statistical surpluses of wheat in Russia.

Generalizations of this sort, however, give an inadequate and misleading impression of the wheat price situation. A striking feature of the year has been the unusual divergence of prices in individual countries. Hence it is necessary to call attention below to important instances of unusual divergence.

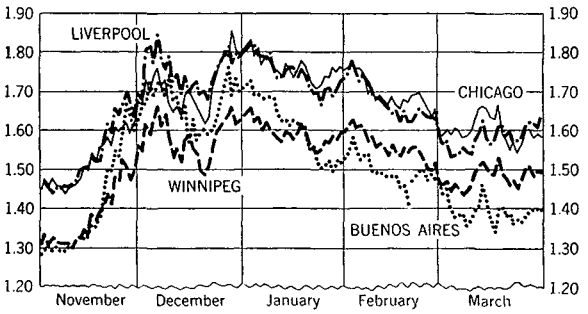
The Course of Wheat Prices

The general course of prices can best be followed with the aid of Chart 5, showing prices of May futures in Liverpool, Chicago, and Winnipeg, and of the February and May futures in Buenos Aires[1] from November 1925 to March 1926.

The striking rise in November, due to the catastrophe to the Argentine crop, culminated about December 10. Naturally this rise was most pronounced in Buenos Aires, where the February future rose by 43 cents within three weeks. But in Liverpool, which had counted heavily on Argentine shipments, prices rose by nearly 40 cents. Chicago futures rose least, since Chicago has not been an international cash market this year. A recession followed the extreme advance, which speculative forces had carried too far. Later in December, however, the substantial downward revision in the United States crop estimate led to a fresh advance, which was naturally sharpest in Chicago.

Chart 5.—Daily Prices of May Wheat Futures in Liverpool, Chicago, and Winnipeg, and of February and May Futures in Buenos Aires, November to March, 1925–26*

(U.S. dollars per bushel)



* Compiled from *Chicago Journal of Commerce; Daily Market Record*, Minneapolis; *Daily Trade Bulletin*, Chicago; *Journal of Commerce*, New York.

From late December or early January until early March the price trend in all these markets was downward. The decline wiped out much of the extreme advance, and brought prices back to the level of late November. Since most changes in official crop estimates since December have been downward, one must interpret this decline as due mainly to an exaggeration, in December, of the tightness of the international wheat position, and in particular of the strength of Europe's import demands. It was due largely, in short, to misjudgments of a situation which really justified a much smaller advance, rather than to new factors of a price-depressing character. The generally favorable outlook for 1926 crops of winter wheat, however, has probably exerted some slight depressing influence. On the whole, the recession bears out our analysis published in December, which led to

[1] The break occurs in Buenos Aires on February 20, when the May future was first quoted about 6 cents higher than the February future the day before.

the conclusion that, because of weakness in European demand, sufficient quantities would prove to be available at prices well below the peak of early December.

It is not surprising that the decline has been relatively moderate in Chicago. Rather it is striking to observe that, with this country in no position to export representative wheats, Chicago prices have responded so much to the movements in foreign markets. This, we take it, is due to the influences of trading in futures. The advance late in December was due primarily to the unexpected reduction in the crop estimate, coupled with a low estimate of winter-wheat plantings, but it was accompanied by an extreme outburst of speculative activity; the average daily volume of future trading on American wheat markets in December was over 90 million bushels, a high record.[1] The subsequent decline was in part a natural reaction from the extreme advance, but another special factor was the increasing conviction that the December crop estimate was below the truth.

It is impressive to note that the decline was relatively least in Winnipeg, despite the fact that Canada has had the largest exportable surplus. May wheat in Winnipeg reached its high point at $1.66 on December 6 and again on December 29. The low point of March 8 was $1.44, and it closed the month at about $1.50. From high to low the decline was only 22 cents as compared with about 34 cents in Chicago, 31 cents in Liverpool, and over 40 cents in Buenos Aires. The lesser decline was due largely to the fact that Winnipeg prices rose less in November and December; but it is quite possible that the Canadian pool may have exerted a stabilizing influence. An additional factor is that Canadian wheat has run lower in grade than earlier in the season,[2] so that grades deliverable on future contracts at par or a premium have been less abundant. Hence the decline in prices of the better grades has been restricted.

The special decline in Argentina, which would presumably be greater still if May futures had been quoted throughout, may be attributed in large measure to the low average quality of Argentine wheat deliverable on new crop futures. The standard for delivery on futures contracts on the Rosario market was fixed in January at 58½ lbs. per bushel, whereas the standard for good crops is as high as 64 lbs. On the Buenos Aires market the standard was first set at 62½, but subsequently reduced to 59¼.[3]

Prices in the United States

In the United States there has been an unusual divergence of prices of wheat of different types. Standard grades of representative milling wheats—hard spring, hard winter, and soft red winter—have been consistently above export parity, though small quantities have been exported. Durum wheat has followed pretty closely the international level. Throughout this crop year No. 2 Amber Durum at Minneapolis has sold at much the same price as No. 1 Manitoba at Winnipeg, and usually 20 cents or more below No. 1 Dark Northern at Minneapolis. Pacific white wheats have also been close to an export basis, in the main, but at times, because of restraint of farm marketing, have stood well above export parity. The trade has complained all season of the farmers' holding policy and the limited export trade. Soft wheats in Pacific coast markets have been 30 to 40 cents under No. 2 Red Winter at St. Louis.

Throughout the season soft red winter wheat has been at a substantial premium, as shown by Chart 6. No. 2 Red at St. Louis has usually been at least 10 cents over the Chicago future. At times in January it was as much as 20 cents above, but the margin narrowed in February. This premium is essentially due to the special shortage in the 1925 crop of good red winter wheat,

[1] See Appendix Table XII. It will be observed that the volume of futures trading in 1925–26 has been about as high as last year.

[2] Spring wheat inspections in the Western Inspection Division, as reported in *Canadian Grain Statistics*, have been as follows:

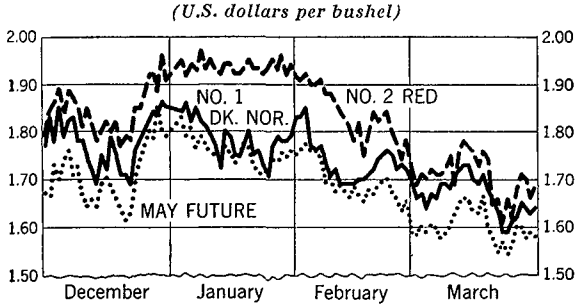
Month	Cars inspected	Percentage No. 3 and over	Month	Cars inspected	Percentage No. 3 and over
Aug.	1,477	63.0	Dec.	47,528	55.5
Sept.	43,306	84.0	Jan.	17,487	38.8
Oct.	48,320	81.3	Feb.	12,450	37.4
Nov.	54,197	56.5	Mar.	7,056	34.6

[3] Respectively, 73, 80, 78, 74 kilos per hectoliter. Cf. *Corn Trade News*, January 12, February 2, March 2, 1926.

which has been intensified by the use of this wheat for mixing with imported Canadian wheat. An interesting consequence has been that appreciable quantities of Pacific soft wheats have moved eastward to the Mississippi Valley, as far as Knoxville, Tennessee. It is rare that the price disparity is large enough to induce such shipments at high freight rates. This movement, while of only a few million bushels, was a material factor in the decline in price of red winter wheat in February.

CHART 6.—DAILY PRICES OF NO. 2 RED WINTER WHEAT IN ST. LOUIS, NO. 1 DARK NORTHERN IN MINNEAPOLIS, AND MAY FUTURE IN CHICAGO, DECEMBER TO MARCH, 1925–26*

(U.S. dollars per bushel)



* Compiled from *Crops and Markets* and *Chicago Journal of Commerce.*

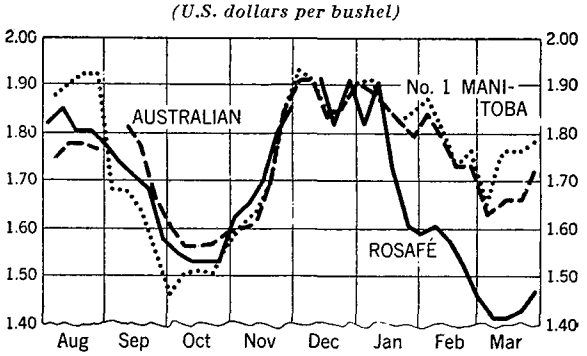
Hard spring and hard winter wheats have been fairly close together, well below soft winter and well above durum. It is highly significant, however, that whereas normally cash wheat is at a discount under the future until the delivery month, this year cash wheats even of these types have commanded a premium over the Chicago May future. In trade terms, carrying charges are "reversed": grain merchants have no inducement to accumulate wheat for future delivery, but stand to lose by so doing. This situation is caused largely by the closeness of adjustment between domestic supplies and requirements, coupled with the tendency of farmers to market their wheat reluctantly. Its natural result is to make for low visible supplies and hand-to-mouth buying by grain merchants. Millers have had to buy cash wheat well in advance, even under the handicap of these "reverse charges," in order to make sure of having supplies adapted to their milling requirements.

DISCOUNT ON ARGENTINE WHEAT

New crop Argentine wheat in European markets has sold at heavy discounts under Manitoba, Australian, and other wheats. Since new crop wheat reached Europe, as shown by Chart 7, Argentine Rosafé has sold in Liverpool at 19 cents a bushel or more below the cheapest competitive wheats, and at times as much as 30 cents below the most expensive wheat quoted. (See also Appendix Table XIII.) Seasonal factors, which commonly put a premium on

CHART 7.—WEEKLY CASH PRICES OF REPRESENTATIVE IMPORT WHEATS IN LIVERPOOL, AUGUST TO MARCH, 1925–26*

(U.S. dollars per bushel)



* Data from *International Crop Report and Agricultural Statistics* and Broomhall's *Corn Trade News.*

Canadian and a discount on Argentine and Australian wheat in the second half of the winter and the early spring, have this year been a distinctly minor factor. The dominant cause has been the poor quality of the wheat, especially that from the northern provinces of Argentina, which is shipped principally from Rosario and is known as Rosafé.[1] "Baril" and "Barusso" wheat, as Liverpool designates the products (largely from Buenos Aires province and La Pampa Central) which are shipped from Buenos Aires and Bahia Blanca, respectively, at first promised well on sample, but have also run far below normal in quality, and have sold only a little higher than Rosafé.

EUROPEAN WHEAT PRICES

Apart from the instances already mentioned, there has been a striking divergence

[1] Argentine and Australian wheats are not graded, hence their prices are materially influenced by variations in quality, whereas No. 1 Manitoba means very much the same thing from year to year.

of wheat prices in different countries. The unity or simplicity of relations suggested by the term "world price of wheat" has been conspicuously absent. A few instances deserve brief comment.

In Italy prices are exceedingly high. Domestic soft wheat has been selling in Milan at prices 20 to 40 cents above the highest-priced imported wheat in Liverpool, 35 to 65 cents above prices of native wheat in England, and 60 to 80 cents above prices of native wheat in Chartres, France. (See Appendix Table XIV.) The high price of wheat in Italy is due to two facts: even an excellent crop falls short of meeting domestic requirements; and a tariff of nearly 40 cents a bushel, in effect since July last, serves to raise prices of import wheat and to raise prices of domestic wheat behind the tariff barrier. Wheat exports have been prohibited.

In France, despite a tariff of about 19 cents a bushel,[1] wheat prices have been relatively low in terms of gold, but have risen with the decline of the franc. The native wheat is ample in quantity for domestic requirements, but includes much low quality wheat. Exports are prohibited, except under licenses given only under special circumstances. Hence small quantities of premium wheats required for blending are imported over the duty, at prices far above prices of native wheats. Both in France and in Italy, prices of native wheats have been little influenced by prices on international markets, and show different trends. French prices (in terms of dollars) declined until December, and have since risen but little; whereas Italian prices have risen almost continuously since last August.

In England native wheat has sold, as usual, at substantial discounts under imported wheat, because of its inferiority to import wheats in respect to quality.

In Germany, the tariff of 23 cents a bushel, effective from September 1, 1925, has not prevented prices of domestic wheat from standing well below prices of imported wheat. Heavy imports in July–August, 1925, in anticipation of the duty, provided large initial stocks of imported wheat. The harvests of wheat, rye, and potatoes were excellent. The resulting tendency to price depression was intensified by the financial difficulties of German farmers, who had to meet heavy obligations incurred in the previous spring, and by the industrial depression and financial stringency, which led millers and grain dealers to operate with low stocks. Moreover, the export demand for rye was limited by reason of good crops elsewhere in Europe. The special cheapness of rye and potatoes encouraged substitution for wheat and reacted upon wheat prices. Propaganda to "Eat More Rye," however, is reported to have had little effect because mills are unable to turn out a rye flour which can compete with wheat flours for classes which ordinarily consume white bread. The rise in prices in November stimulated exports, which were facilitated by the use of import certificates. Although prices remained at an export level until February, the opportunity to export afforded substantial relief to the farmers and led to a rapid advance in domestic wheat prices. Indeed, except in September and October, prices of native wheat have been generally higher than in the corresponding months of 1924–25, and much higher than in 1923–24. (See Appendix Table XIV.) By March 1 prices had risen above an export basis, exports had practically ceased, and farmers were said to be holding for higher prices.[2]

In the surplus-producing countries of the Danube basin, prices have been depressed by reason of the low quality of native wheats, and the fact that, with large crops in importing countries, the export demand was mainly for high-quality wheat. Internal influences have been unusually important in determining the level and course of prices. Financial stringency, and subsequent difficulties in marketing flour, caused the mills to be reluctant buyers. On the other hand, farmers marketed slowly, in anticipation of higher prices later in the season, and were able to profit by the disaster to the Argentine crop. Roumania's export tax was prohibitive until late in March, and then only moderately reduced.

[1] Increased 30 per cent by the budget bill passed in April.

[2] See an interesting statement of Germany's wheat position, by Dr. Justus Schloss of Frankfurt, in *Corn Trade News*, April 13, 1926.

V. PROSPECTS FOR 1926 CROPS

No confidence can be placed in forecasts of the 1926 crops at this early date. Spring-wheat planting is not yet completed. Winter wheat in most countries is two or more months from harvest. Yield per acre, the dominant factor determining size of crops, cannot yet be prophesied with any close approach to accuracy by the aid of condition figures, weather forecasts, or ten-year averages. Yet it is desirable to review, for several different areas, certain elements in the position which afford some basis for appraising the outlook this early in the season. On the whole, present information suggests that the Northern Hemisphere crops of 1926 will be at least of average size, and more normally distributed than in 1925.

India and North Africa

The earliest harvests are those of India and North Africa. In British India a short monsoon rendered conditions last autumn unfavorable for sowing, and the area planted is reported as 29.9 million acres, as compared with 31.8 million for the previous crop. Winter rains did not wholly repair the moisture deficiency. The result is a relatively small crop, provisionally estimated as 320 million bushels, no more than sufficient to supply domestic requirements.[1]

In the exporting countries of North Africa the acreage is reported slightly larger than the large acreage of last year. The crops have progressed favorably on the whole, and good crops are in fair prospect. But no forecasts of yield are yet available.

United States Winter Wheat

The outlook for American winter wheat is this year of special importance for the wheat market of the next few months. A large crop, available for early exports, would contribute greatly to easing the international position, and the effect would be felt in advance of actual exports. A small crop would prolong the period of comparative tightness, regardless of the ultimate outturn elsewhere. Broadly speaking, present indications point to large crops of hard red winter and in the Pacific Northwest, and a poor crop of soft red winter wheat.

Preliminary figures of the Department of Agriculture show a reduction of about 416,000 acres, or one per cent, in the acreage planted to winter wheat last fall as compared with the preceding year. According to a survey made last August, farmers had intended to plant about 9.7 per cent more acreage than in the preceding fall. But in some sections drought (ended in September) prevented early plantings and soil preparation; later unusually wet weather, and in some areas snow and low temperatures, interfered with sowing. The principal decreases occurred in the states producing soft red wheat, notably Ohio, Indiana, Illinois, and Missouri, where the reported reduction totalled about a million acres; there was some increase in the lesser wheat states of the Atlantic seaboard from New Jersey to Georgia. In Montana, Washington, and Oregon, where the wheat had to be sown in very dry ground, there was also a reduction of some 527,000 acres, but most of this may be made up by spring plantings. On the whole, the planted acreage of soft winter wheat is distinctly smaller than that sown for the 1925 crop. On the other hand, the acreage of hard winter wheat is distinctly larger. Kansas and Oklahoma report a total increase of over a million acres, Colorado and New Mexico additional increases, and Texas the same as last year.[2]

Comparative figures for area sown to winter wheat since 1919 show that in the past three years the planted area has been fairly constant at a little under 40 million acres, as compared with a high record of 51½ million acres sown in 1918, and an average of 46 million acres in the four years 1920–23.

The December 1 condition of the winter-wheat crop was reported as averaging 82.7 per cent of normal, as compared with a ten-year average of 84.9, the reduction being caused by cold, wet weather. In general, the condition was reported well below aver-

[1] *Foreign Crops and Markets*, February 8, March 22, 1926, pp. 157, 345, and later revision of acreage.

[2] *Crops and Markets, Monthly Supplement*, December 1925, p. 378.

age in the principal soft winter wheat states, and well above average in the principal hard winter wheat states.[1] The winter, however, was unusually favorable in the Pacific Northwest and the hard winter wheat states, though unfavorable in the leading states producing soft red winter. Hence the condition figures for April 1 show an average of 84.1 per cent of normal[2] as compared with a ten-year average of 79.2 and a 1910–14 average of 83.7. Although official estimates will not be available until May 8, it seems clear that abandonment of fall-sown acreage will be below average, perhaps quite small,[3] and that the harvested acreage will be much larger than in 1925, when the abandonment was especially heavy. Trade statisticians forecast a winter-wheat crop of 540 to 590 million bushels as compared with 398 million last year.

In the Pacific Northwest conditions have been ideal for winter wheat, and there is talk of a bumper crop. A dry autumn and the shortage of snow caused some concern, but there has been abundant rainfall and no frost damage of any consequence. Early in March the condition of winter wheat was reported the best since 1922, and conditions for spring planting excellent.[4] Favorable conditions have continued in April. All of the states producing hard red winter wheat showed an April 1 condition well above average, and the chief producers—Kansas, Nebraska, Oklahoma, and the Panhandle of Texas—show the greatest improvement over the ten-year average. This affords the basis for roseate prophesies of remarkable crops. On the other hand, with one exception, all the states which rank high as producers of soft red winter wheat reported an April 1 condition below the ten-year average, exceptionally low in Illinois and Missouri. Texas, which produces both hard and soft wheats, is the notable exception, with a condition figure of 93 as compared with a ten-year average of 71. On this basis the crop of soft red winter is expected to be below even the poor crop of 1925.

It must be emphasized, however, that the condition reports of April 1 afford a very unreliable basis for a forecast of the winter-wheat crop. Substantial improvement or deterioration commonly occurs in the spring and even up to harvest. In 1921, for example, the April 1 condition report was 91 per cent, less than 5 per cent of the acreage sown was abandoned, and even the condition reported at harvest was next to the highest of the past five years; yet the yield per acre was only 13.8 bushels, well below average. The most that can be said is that present indications *point to* a harvested acreage of around 37 million acres, and to a yield per acre above average in the hard winter wheat area and the Pacific Northwest, and somewhat below average in most soft winter wheat areas.

On this basis, however, it appears likely that there will be a substantial surplus of hard winter and Pacific wheat after the next harvest. But if, as now seems highly probable, the carryover into 1926–27 proves unusually small, part of the surplus from the new crop will go to replenish stocks and be carried over into 1927–28. After the short crop of 1925, leaving a low carryover, a total crop of 800 million bushels in 1926 would probably mean an effective export surplus not of 160 million bushels but of something like 120 million. This would not imply a large surplus of representative wheats, since flour exports may well account for more than 50 million bushels, and exports of durum and Pacific wheats for at least 40 million more.

Europe, Including Russia

In Europe, as in the United States, weather conditions last autumn were generally sufficiently unfavorable to occasion some reduction in the area sown to winter wheat.

[1] *Crops and Markets, Monthly Supplement,* December 1925, p. 378.

[2] Private estimates, with suggested figures for crops, ran somewhat higher, as follows:

Authority	Percentage of normal	Million bushels
Bryant	87.1	589
Cromwell	85.0–87.6	540–590
Murray	87.6	570
Snow	85.4	563

[3] On the basis of the formula devised by the Department of Agriculture, which has worked fairly well in the period 1901–1925, the percentage of abandonment would be 9.2. See *Crops and Markets, Monthly Supplement,* December 1925, p. 425. Murray's estimate on April 2 was 5.4, Cromwell's about 8.

[4] *Commercial Review,* Portland, Oregon, March 2, 1926.

Italy, indeed, reports an increased acreage, partly as a result of the stimulus of high prices and the prospect of their continuance behind the high tariff wall.[1] Athough the available data are incomplete and not highly reliable, it seems probable that Europe's wheat acreage this year will be a little smaller than last year's but larger than in any other post-war year.

In general the late fall and winter were reasonably favorable. Moisture was ample but generally not excessive. In several countries floods did serious local damage, but not enough to be a large factor in the aggregate. Where winter killing is a danger, the snow cover was generally adequate. Broadly speaking, fall-sown cereals came through the winter in fairly good condition, better certainly than in 1924, probably not so good as in 1925. A mild winter and an early spring furnished generally favorable conditions for spring planting.

On general principles, however, it seems improbable that European crops in 1926 will equal the large crops of 1925. A cursory study of statistics of yield per acre in Europe and North Africa shows that, as a rule, a year of yields distinctly above average is commonly followed by a year of yields somewhat below average. This has been strikingly true since the war. In 1921, 1923, and 1925 yields were generally above average; in 1922 and 1924, generally below. Broadly speaking, a similar tendency seems to have obtained before the war, though there have been numerous exceptions. For such fluctuations there may easily be a physical cause. In the light of this evidence we are not justified in assuming that yields will be as high in 1926 as they were in 1925, or even in assuming average yields in 1926. For Europe as a whole an average yield of 17 bushels per harvested acre would not seem an unreasonable prospect. With a harvested area of 65 million acres this would mean a crop of about 1,100 million bushels. This is probably a conservative figure. It is about the same as the average of 1920–24 crops, which included two years of high yields and three of low, from an average area smaller than will probably be harvested in 1926. But the statistical evidence does not warrant expectations of a crop exceeding 1,200 million bushels, which would be nearly 200 million bushels less than that harvested in 1925.

[1] The Italian government is conducting a serious campaign (*Battaglia del Grano*) to increase wheat production to cover domestic needs, but is laying stress not on increase of acreage but on improved methods of cultivation calculated to increase yields per acre. See the excellent article by Giulio Costanzo in *International Review of Agricultural Economics*, January–March, 1926, IV, 70–86.

[2] On the basis of revised figures for 1924 acreage, viz., 16,875,000 acres. This represents a reduction of nearly a million acres from the previous estimate.

North American Spring-Wheat Prospects

Since 1920 the American spring-wheat acreage has been around 20–21 million acres except in 1923, when it was less than 17 million. Last year farmers reported on March 1 intentions to plant 14 per cent more acreage, but the actual increase proved to be over 24 per cent.[2] Two factors chiefly accounted for the excess of actual plantings over intended plantings — an early spring with favorable weather in the sowing season, and the replacement of abandoned winter-wheat plantings especially in the Pacific Northwest; but the high prices prevailing in the spring of 1924 and the unfavorable outlook for winter wheat were other factors contributing to the expansion as compared with 1923. The result was a planting of 20,931,000 acres, more than in any preceding year except 1918, 1919, and 1920.

This year farmers reported on March 1 intentions to plant nearly 2 per cent less spring wheat than was planted in 1925. Strikingly enough, in view of the relatively low prices of durum wheat in 1924–25, an intended increase of nearly 20 per cent in durum-wheat acreage is reported; while a reduction of 8 per cent in other spring-wheat acreage is suggested. As might be expected, the intended reduction is greatest in the western states, most of all in Washington and Oregon, where spring-wheat acreage was abnormally large in 1925. The figures suggest that there is no clear trend of increase or decrease in spring-wheat acreage. One must regard the acreage of 1924 as exceptionally small because of weather conditions and unfavorable prices, and that of 1925 as increased by reason of the heavy abandonment of winter-wheat acreage and

the favorable spring. The favorable outlook for winter wheat in the United States and abroad, suggesting lower wheat prices in the United States for the 1926 crops, registered in the substantial discount on the September future, may have the effect of offsetting the stimulating influence of this year's prices for bread wheats. In any event, weather conditions are much more important than price prospects in determining the acreage planted in a particular season.

The spring has been late and cold. In certain parts of the western spring-wheat belt, moisture is badly needed. Accordingly seeding has been delayed. Under these circumstances, an expansion of spring-wheat acreage seems improbable and the crop has not had a fine start. But experts differ as to the extent over which unfavorable conditions have prevailed, and some consider the spring conditions satisfactory.

Available information from Western Canada indicates a complex situation. Fall plowing was hindered by delayed harvest work and inclement weather; hence less than the usual amount, though apparently more than for last year's crop, was accomplished. Autumn rains and the winter snowfall, however, apparently furnished abundant subsoil moisture. The winter was mild, and conditions were at first favorable for spring plowing. It was reported that much new land would be planted this year for the first time. Recent conditions in the Canadian Northwest, however, have been disquieting. Around the first of March, heavy snows fell, retarding the completion of spring plowing. In some areas moisture is reported below normal, and seeding is delayed. Because of the high percentage of lower-grade wheat in the last Canadian crop, some farmers are skeptical of the quality of seed. These factors tend to restrict acreage, to reduce the time between seeding and frost date in the fall, and to increase the hazards of the crop. Certainly at present one is not justified in expecting as large a crop in 1926 as was harvested in 1925; but competent authorities in Canada still regard the spring condition as not unfavorable, and much depends upon the weather of late April and early May. Neither acreage nor condition can yet be determined.

VI. OUTLOOK FOR TRADE, PRICES, AND CARRYOVERS

A high degree of interrelation exists between the prospects for trade and prices in the closing months of the crop year and the carryovers at the end. All will be materially influenced by the progress of growing crops and the results of crops harvested early in the summer. Yet it is desirable to set down certain probabilities and possibilities.

International Trade

In the aggregate, the international trade in wheat and flour promises in the last third of the crop year to be a little lower than the average of the two preceding four-month periods. A peak of shipments is to be expected in May, after the opening of navigation in Canada. If the American crop of hard winter wheat fulfils its promise, and if prospects of an early harvest are realized, United States exports will probably be larger than usual in July.

Canada will continue to be the principal source for exports in the closing months of the crop year. The indications are that Canada still had on April 1 an exportable surplus of 80 to 100 million bushels, some of lower grades; most of this may be expected to be shipped before August 1.

Argentine shipments seem likely to be well maintained, especially since soft wheats are scarce in Liverpool. But since much of the wheat is so poor that it can be marketed only if mixed with better grades, there is a prospect that more than usual will be held over for mixing with wheat from the next crop. Australia has already shipped the bulk of her export surplus. The United States will export moderate quantities of flour of durum and Pacific wheat, and doubtless hard winter soon after harvest. India may be expected to export little or none. North African exporters still have paper surpluses, and if the new harvest

turns out well they may export at a more rapid rate than heretofore. Exports from Germany and Poland are at an end. The Danube states, including Roumania, will presumably export moderate quantities, but not heavily unless the new crops promise to be large and/or export prices should move sharply upward. Russia's exports are, as heretofore, a highly uncertain quantity. The surplus potentially available for export is considered large, but the practical obstacles to exports continue to operate and seem likely to prevent the export of important quantities. In recent weeks, however, shipments of considerable size have been reported.

Europe seems likely to continue to buy from hand to mouth, and ex-European importers in lesser amounts. The substantial discount on July and September wheat stimulates the postponement of imports so far as this can be done. While the prices for the May futures in Liverpool and Chicago are close together, the price of the Liverpool October future is above that of the Chicago September future by practically the shipping difference. It is significant that European inquiries for American wheat for delivery from the new crop were reported as early as March. European purchases will depend in considerable degree on the developing prospects for their crops in 1926 and for world wheat prices in the next crop year.

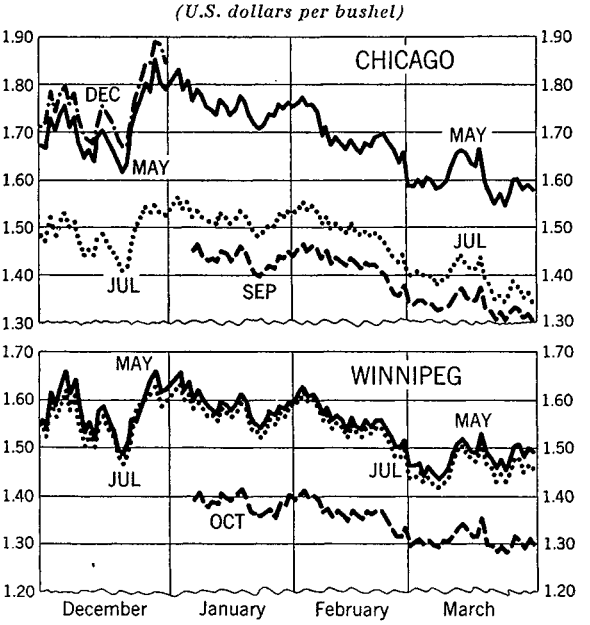
A point of particular importance in the adjustment of supplies at the end of the crop year in Europe lies in the timeliness of the wheat and rye harvests. These are in some years two, three, or even four weeks earlier than in other years. A position of supplies that with an early harvest would represent a normal European carryover might with a late harvest reduce stocks to a dangerously low level. So far as information is available, European winter wheat and rye crops have come through the winter in a condition which, granted normal climatic influences henceforth, will give a harvest of at least average earliness. Rain and low temperature are the factors that defer the harvest and these usually operate during the summer months, hence no conclusion can be reached at the present time.

THE PRICE OUTLOOK

On both the Chicago and the Winnipeg markets, as shown in Chart 8, new crop futures are at a heavy discount under May futures. In recent months the margin has been around 20 cents for the nearest new-crop future. The September future in Chicago is several cents under the July. Part of this discount is normal: the May future

CHART 8.—DAILY PRICES OF PRINCIPAL WHEAT FUTURES IN CHICAGO AND WINNIPEG, DECEMBER TO MARCH, 1925–26*

(U.S. dollars per bushel)



* Compiled from *Chicago Journal of Commerce.*

is ordinarily highest because of heavy carrying charges accumulated on old wheat. But so great a discount is uncommon. It is sufficiently heavy to indicate a market judgment that the wheat position, both in the United States and on the international market, will be easier in 1926–27 than it has been in recent months. In the case of Winnipeg, the discount on the October future has been about the same as last year or a little less; but that discount was the wider because the 1924 crop was exceptionally small. A similar discount after a large crop has a different meaning.

The effect of such a substantial discount on new-crop futures is, of course, to induce holders of wheat to build down their stocks

as the end of the crop year approaches, and to lead buyers of wheat to postpone purchases so far as possible until new wheat becomes available. It makes accordingly for weakness in demand from importing countries, and for low carryovers in exporting countries and of import wheat in importing countries. As prospects for new crops change, this margin will narrow or widen according to developments.

Quotations of new-crop futures, this far in advance of harvest, afford highly imperfect forecasts of actual prices of new-crop wheat when it comes on the market. Nevertheless, it is of interest to observe that both in this country and in Canada, new-crop futures in April 1926 are at about the same level as in April 1925. It may be inferred that the composite judgment of the speculative markets is that wheat prices in 1926–27 may be expected to be no higher than the prices characteristic of 1924–25 or 1925–26, but much higher than the prices characteristic of 1923–24.

We venture to suggest, however, that the present position of the later futures may be influenced too greatly by immediate prospects and too little by possibilities that winter crops may suffer reverses and that spring crops may progress poorly. Moreover, current prophesies of American export surpluses in 1926–27 take too little account of the prospect of an unusually low carryover on June 30. Latest reports from the North American spring-wheat areas do not seem to justify the recent discounts of September wheat under July. Our tentative judgment is that the September future in Chicago and the October future in Winnipeg reflect lower prices for 1926–27 than will prove to prevail.

For the rest of this crop year, however, we consider it probable that it will gradually come to be recognized that, in the United States and on the international market, the adjustment of supplies and requirements is less close than the trade has commonly believed, and that no sustained advance in prices will occur unless new-crop news should prove distinctly unfavorable. Fluctuations must be expected, but a study of the present evidence leads us to believe that declines from the mid-April level are more probable than advances. In certain countries of Europe, notably in France, where prices of native wheat have been unusually depressed, advances in prices may be looked for as the end of the season approaches.

Outward Carryovers

The prospect is that exporting countries will, in the main, have moderate to low carryovers at the end of this crop year, and that visible supplies on July 31 will be quite low, in the aggregate.

In larger measure than usual, the size of the carryover into the next crop year will depend on new-crop developments between May and July. If the American hard winter crop should continue to develop favorably and North American spring-wheat crops not develop unfavorably, and especially if European harvests promise well, we may expect stocks in export countries to be reduced to small dimensions. This might mean some increase in European import stocks from their present low level. If, on the other hand, the harvest of 1926 should later promise to be moderate or small, and good prices are in prospect for the new crops, export stocks will presumably not be so greatly reduced. Last year price considerations and crop developments outside the United States made for low carryovers, but the unexpectedly weak demand from Europe in the spring, coupled with the unfavorable development of winter wheat in the United States —the earliest to be available to the international market in large volume—prevented them from falling to very low figures.

The size of the Canadian carryover will be influenced by the outlook for the 1926 harvest in Canada, by the export price outlook, the judgment of the pools on the price outlook, and by the actual size of the crop of 1925. For Canada, the Dominion Bureau of Statistics suggests a prospective carryover on July 31 of 25 million bushels, about the same as last year. We incline to the view that the crop has been underestimated, and that the Canadian carryover will be substantially larger than in 1925 unless conditions be such as to promote heavy exports in May, June, and July. The Argentine surplus on July 31 will probably be of liberal size, because it will include substantial

quantities of low-grade wheat which cannot now be marketed to advantage, and which, unless fed to animals, will be held over until the next harvest for mixing with better wheat. The government is said to be planning to facilitate holding some 25 million bushels of such wheat. The Australian export surplus on July 31 will probably be low, chiefly because of the rapid marketing of the small crop. Stocks afloat on July 31 seem likely to be small, including less than usual from distant exporters but more than usual from North America.

There is reason to believe that European stocks of import wheat on August 1 will be low, as they have been during most of this year. On the Continent generally, and in Russia and the Danube basin in particular, it seems probable that stocks of domestic wheat will be of at least normal size, and much larger than on August 1, 1925. In the countries of the Danube basin, the carryover may consist largely of low-quality wheat reserved for mixing with better wheat from the new harvest. Financial stringency in Germany, France, and elsewhere, will make for low carryovers of import wheat.

The indications are clear that the United States carryover on June 30, 1926, will be unusually low. The carryover on June 30, 1925, was of fair size; it was smaller than the year before because of the tight international position in 1924–25 resulting from short crops in Europe and Canada, but no smaller because of the light demand from importing countries in the spring of 1925 and the poor outlook for this country's winter-wheat crop. This year domestic influences will be the dominant factors. A study of previous experience shows that farm stocks are usually at a maximum when a large crop is followed by a small crop and at a minimum when a small crop is followed by a large crop. Though it is too early to predict the 1926 crop, it is fair to assume that it will be substantially larger than the crop of 1925, and consequently that farm stocks will be well below average on June 30. The fact that country stocks were unusually low on March 1 (see p. 217) affords supporting evidence for this view.

There are similar reasons for inferring that stocks in country elevators and visible supplies will be low on June 30. These reasons are reinforced by the fact that our exportable surplus for the year has been so small that very little export wheat will be carried over. Considerations of milling practice will lead millers to maintain working stocks, but these too seem likely to be low or moderate. The May option has ruled at a substantial premium over the July option. There is every inducement to millers, dealers, and bakers to hold small stocks. Farmers have little inducement to hold wheat in their bins over the summer. In short, the carryover this year will presumably consist largely of close to minimum "administrative stocks" in the hands of elevators, traders, flour mills, and bakeries. For the first time on June 30 this year we shall have a fairly close approximation to the actual carryover, since the government will secure improved estimates of country stocks and visible supplies and will continue its census of mill stocks.

Granted that the carryover will be low, how low will it be? The Millers' National Federation, in a bulletin dated February 23, forecast a carryover June 30 of 48.7 million bushels, exclusive of hitherto unreported stocks. Other private experts, and our own tentative estimates of the probable disposition of wheat during the year,[1] point to a figure of about the same size for country stocks and visible supplies, *on the basis of the official crop estimate*; but they may easily be 10 million bushels more or less than this. In any event, if one accepts the official crop estimate as correct, it is reasonable to expect a lower carryover than any since 1919, when the total was estimated at 50 million bushels. If, however, the crop is materially underestimated, the carryover may well be larger, and the figure will afford a useful check on the crop estimate.

[1] See Appendix Table II.

This issue has been written by Joseph S. Davis, with substantial assistance from Alonzo E. Taylor, and with the aid of Margaret Milliken and the statistical staff of the Institute. To M. Auge-Laribé, our French correspondent, we are indebted for valuable data concerning France

APPENDIX

TABLE I.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING AREAS, PRE-WAR AND POST-WAR*

(Million bushels)

Year	United States	Canada	British India	Australia	Argentina	Chile	Uruguay	Hungary	Bulgaria	Jugo-Slavia	Roumania	Soviet Russia
1919	968.0	193.3	280.3	46.0	217.0	19.9	5.9	....[a]	29.8	51.0	66.0	.....[a]
1920	833.0	263.2	377.9	145.9	156.1	23.2	7.8	38.3	30.0	43.0	61.3	318.2[b]
1921	814.9	300.9	250.4	129.1	191.0	23.6	9.9	52.7	29.2	51.8	78.6	204.7[b]
1922	867.6	399.8	367.0	109.5	195.8	25.9	5.2	54.7	37.7	44.5	92.0	242.5[b]
1923	797.4	474.2	372.4	125.0	247.0	28.1	13.3	67.7	36.2	61.1	102.1	330.5[b]
1924	862.6	262.1	360.6	164.0	191.1	24.9	9.9	51.6	28.3	57.8	70.4	330.6[b,c]
1925	669.4	411.4	324.7	107.0	191.1	27.6	....	67.6	49.6	82.3	104.6	577.1[b,c]
Average 1909–13[d]	690.1	197.1	351.8	90.5	147.1	20.1	6.5	71.5	37.8	62.0	158.7	758.9
1920–24	835.1	340.0	345.7	134.7	196.2	25.1	9.2	53.0	32.3	51.6	80.9	285.3

Year	Morocco	Algeria	Tunis	Egypt	United Kingdom	France	Germany	Italy	Belgium	Netherlands	Denmark	Norway
1919	16.4	21.0	7.0	30.1	69.3	187.1[e]	79.7	169.8[f]	10.6	5.9	5.9[f]	1.07
1920	17.9	8.4	5.2	31.7	56.8	236.9	82.6	141.3	10.3	6.0	7.4	1.00
1921	23.2	28.2	10.6	37.0	73.8	323.5	107.8	194.1	14.5	8.6	11.1	.97
1922	12.9	17.0	3.7	36.6	65.2	243.3	71.9	161.6	10.6	6.2	9.2	.64
1923	20.0	36.2	9.9	40.7	58.5	275.6	106.4	224.8	13.4	6.2	8.9	.59
1924	28.7	17.2	5.2	34.2	52.6	281.2	89.2	170.1	13.0	4.6	5.9	.49
1925	21.1	40.3	11.8	36.6	53.6	329.1	118.2	240.8	14.1	5.1	8.8	.56
Average 1909–13[d]	17.0	35.2	6.2	33.7	59.6	325.6	131.3	184.3	15.2	5.0	6.3	.31
1920–24	20.5	21.4	6.9	36.0	61.4	272.1	91.6	178.4	12.4	6.3	8.5	.74

Year	Sweden	Spain	Portugal	Switzerland	Austria	Czecho-Slovakia	Poland	Finland	Latvia	Esthonia and Lithuania	Greece	Japanese Empire
1919	9.4	129.2	8.2	3.9	5.1	15.4[g]	22.2[f]	.26	...[a]	3.07	9.8	41.3
1920	10.3	138.6	10.4	3.6	5.4	26.4	22.7	.27	.39	2.60	11.2	41.3
1921	12.3	145.2	9.4	3.6	6.5	38.7	37.4	.45	.78	3.27	11.2	39.9
1922	9.4	125.5	9.8	2.3	7.4	33.6	42.5	.71	.96	4.03	9.6	40.0
1923	11.1	157.1	13.2	3.6	8.9	36.2	49.7	.69	1.64	3.70	13.4	35.3
1924	6.9	121.8	10.5	3.1	8.5	32.2	32.5	.79	1.58	3.86	9.7	35.9
1925	13.8	162.6	11.5[c]	3.5	12.0	36.6	57.8	.75	2.17	6.08	11.2	40.0[h]
Average 1909–13[d]	8.1	130.4	11.8	3.3	12.8	37.9	63.7	.14	1.47	3.63	16.3	32.2
1920–24	10.0	137.6	10.7	3.2	7.3	33.4	37.0	.58	1.07	3.49	11.0	38.5

* Official estimates of the various countries, here drawn chiefly from publications of U.S. Department of Agriculture.

[a] Data not available.

[b] Including Siberia and Kirghisia, but not complete for Asiatic Russia.

[c] From *International Crop Report and Agricultural Statistics.*

[d] Including U.S. Department of Agriculture estimates for area within post-war boundaries. Russian figures include most Asiatic territory.

[e] Includes only part of Alsace-Lorraine.

[f] Old boundaries.

[g] Bohemia and Moravia only.

[h] Excluding Formosa and Kwantung.

TABLE II.—WHEAT SUPPLIES AND THEIR APPROXIMATE DISPOSITION IN LEADING EXPORTING COUNTRIES, 1923–24 TO 1925–26*

A.—UNITED STATES: CROP YEARS ENDING JUNE 30

Item	Approximations 1923–24	Approximations 1924–25	Estimate 1925–26
Wheat stocks, July 1	102.4	106.2	86.8[a]
New crop	797.4	862.6	669.4[a]
Total supplies	899.8	968.8	756.2
Net exports: July–Mar.	107.1	216.7	63.7[a]
Apr.–June	21.4	35.2	11.3
Total net exports	128.5	251.9	75.0
Shipments to possessions	2.9	2.8	2.8
Seed requirements	79.4	87.6	83.3
Milled for consumption	504.9[b]	484.6[b]	500.0
Feed and waste	78.0	65.2	50.0
Total domestic use	662.3	637.4	633.3
Wheat stocks, June 30	106.2	86.8	45.1

B.—CANADA: CROP YEARS ENDING (AUG. 31) JULY 31

Item	Approximations 1923–24 Sept–Aug.	Approximations 1924–25 Aug.–July	Estimate[a] 1925–26 Aug.–July
Wheat stocks, (Sept. 1) August 1	8.9	39.1	26.5[c]
New crop	474.2	280.0[d]	411.4
Total supplies	483.1	319.1	437.9
Net exports: Aug.–Mar.	228.8[c]	137.9	240.2
Apr.–July	113.9[c]	54.2	71.3
Total net exports	342.7[c]	192.1	311.5
Seed requirements	38.6	38.8[f]	40.0
Milled for consumption	41.5	39.0[f]	42.0
Unmerchantable grain	19.4	12.0	10.2
Loss in cleaning	11.9	7.9	9.2
Other feed, loss, etc.	2.7	2.8	
Total domestic use	114.1	100.5	101.4
Wheat stocks, (Aug. 31) July 31	26.3	26.5[e]	25.0

C.—ARGENTINA: YEARS ENDING JULY 31

Item	Approximations 1923–24	Approximations 1924–25	Estimate 1925–26
Wheat stocks, August 1	54.2	59.6	57.2
New crop	247.0	191.1	191.1[a]
Total supplies	301.2	250.7	248.3
Exports: Aug.–Mar.	96.6	91.2	54.4[f]
Apr.–July	75.6	32.4	55.6
Total exports	172.2	123.6	110.0
Seed requirements	20.6	23.1	23.1
Consumption, feed and waste	48.8	46.8	60.0
Total domestic use	69.4	69.9	83.1
Wheat stocks, July 31	59.6	57.2	55.2

D.—AUSTRALIA: YEARS ENDING JULY 31

Item	Approximations 1923–24	Approximations 1924–25	Estimate 1925–26
Wheat stocks, August 1	45.4	41.2	35.6
New crop	125.5	164.0	107.0[a]
Total supplies	170.9	205.2	142.6
Net exports: Aug.–Mar.	56.9	74.6	56.4[f]
Apr.–July	28.7	48.9	8.6
Total net exports	85.6	123.5	65.0
Seed requirements	9.4	9.4	9.5
Consumption	31.2	36.7	35.5
Feed and waste	3.5		
Total domestic use	44.1	46.1	45.0
Wheat stocks, July 31	41.2	35.6	32.6

* These tabulations, while based on official data and estimates so far as these are available, involve a number of approximations. The Canadian figures are those of the Dominion Bureau of Statistics, except for several figures for 1924–25, when the official crop estimate yields seemingly impossible results. The United States data are largely official, except as noted, for 1923–24 and 1924–25, but for 1925–26 are our own estimates from net exports April–June down. The Argentine and Australian tabulations rest upon official data for crops and trade, occasional official estimates of domestic use by calendar years, and incomplete reports of exportable surpluses as of January 1 or other dates.

We believe both the United States and Canadian crops of 1925 are larger than officially estimated, and anticipate larger carryovers and perhaps larger exports than those indicated. We also believe the estimates for American milling for consumption somewhat too low, and the feed and waste figure correspondingly high.

[a] As officially reported or estimated.

[b] Mill grindings reported by Census Bureau, varied to allow for non-reporting mills, plus 2 per cent for small merchant mills and custom mills; less net exports and shipments of flour.

[c] For 1923–24, September–March, April–August, and September–August, respectively.

[d] Our substitution for official estimate of 262.1.

[e] As recently stated in a press release of the Dominion Bureau of Statistics.

[f] Partly estimated.

TABLE III.—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[a]			
	1922-23	1923-24	1924-25	1925-26	1922-23	1923-24	1924-25	1925-26	1922-23	1923-24	1924-25	1925-26
Aug.	60.6	65.3	93.0	43.3	3.7	2.0	1.3	1.2	.05	...	.32	.55
Sept.	57.7	45.3	82.1	57.9	37.0	28.3	7.1	45.7	.19	.22	.24	.29
Oct.	48.3	40.5	88.0	36.0	65.1	67.0	40.9	53.2	1.70	3.23	4.14	7.04
Nov.	42.5	37.2	60.5	34.1	56.8	72.5	42.7	51.5	1.90	3.04	4.93	9.79
Aug.–Nov.	209.1	188.3	323.6	171.3	162.6	169.8	92.0	151.6	3.84	6.49	9.63	17.67
Dec.	45.3	28.4	36.3	34.9	32.0	51.9	20.3	53.5	3.26	6.76	3.91	6.15
Jan.	37.6	15.9	24.7	21.6	11.6	12.7	4.1	10.5	3.22	7.27	4.42	10.03
Feb.	21.6	19.8	19.9	16.8	3.2	3.9	6.2	4.0	1.46	7.32	2.36	7.74
Mar.	21.7	18.0	17.3	15.1	6.0	2.5	8.5	3.2	1.44	8.09	.97	6.98
Dec.–Mar.	126.2	82.1	98.2	88.4	52.8	71.0	39.1	71.2	9.38	29.44	11.66	30.90
Apr.	21.9	10.1	10.4	....	7.6	6.4	8.1	...	1.68	6.47	1.03	....
May	16.7	15.4	17.7	....	10.6	15.8	7.1	...	1.26	5.24	2.09	....
June	18.2	16.4	21.9	....	6.9	21.2	4.1	...	.57	3.06	.90	....
July	33.8	35.1	41.8	....	6.0	13.1	6.7	...	.19	1.31	.22	....
Apr.–July	90.6	77.0	91.8	....	31.1	56.5	26.0	...	3.70	16.08	4.24	....
Aug.–July	425.9	347.4	513.6	....	246.5	297.3	157.1	...	16.92	52.00	25.53	....

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

[a] Vancouver data for 1922–23 and 1923–24 are monthly totals as given in the official annual *Reports on the Grain Trade of Canada;* for 1924–25 and 1925–26 figures are 4-week and 5-week totals, as given in *Canadian Grain Statistics.*

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

(Million bushels)

Month	United States				Fort William and Port Arthur				Vancouver			
	1922-23	1923-24	1924-25	1925-26	1922-23	1923-24	1924-25	1925-26	1922-23	1923-24	1924-25	1925-26
Dec.	10.55	7.18	14.18	9.74	9.67	16.11	9.50	14.64	.65	1.37	1.08	1.94
	9.07	6.73	9.23	9.66	8.28	13.82	6.26	14.77	.72	1.58	1.18	1.30
	10.64	8.02	6.74	8.64	5.15	12.24	2.88	14.56	.76	1.53	1.18	.74
	11.53	5.31	4.79	6.18	5.53	7.10	2.10	8.82	.61	1.41	.47	2.15
Jan.	9.64	3.19	4.08	3.45	4.19	5.34	1.39	4.98	.95	1.63	.74	.60
	8.85	3.27	4.10	6.22	2.96	3.56	1.02	4.32	1.06	1.69	1.12	1.86
	8.00	3.49	5.29	5.23	1.78	2.44	.71	2.73	.82	1.47	.87	1.99
	7.62	3.70	6.30	4.64	1.82	2.24	.93	1.63	.43	1.69	.72	2.73
	7.01	4.13	6.32	4.39	1.47	2.05	1.09	1.31	.55	1.75	.96	2.78
Feb.	5.29	3.84	6.77	4.31	.92	1.26	.93	1.21	.46	1.77	.59	2.42
	4.48	5.89	5.08	4.06	.81	1.06	1.64	1.09	.46	1.83	.57	1.93
	5.17	4.44	4.28	5.05	.44	.73	1.65	.83	.29	1.73	.61	1.88
	5.74	5.12	3.78	3.37	.69	.52	1.95	.84	.23	1.73	.58	1.51
Mar.	5.74	4.72	4.71	3.79	1.05	.63	2.06	.69	.31	1.75	.32	1.69
	4.77	4.67	4.52	3.01	1.71	.52	2.10	.71	.26	1.94	.19	1.43
	4.13	4.03	3.86	3.50	1.52	.72	2.08	.80	.34	2.12	.19	1.27
	4.24	3.34	3.20	3.50	1.47	.53	1.78	.66	.39	1.88	.27	1.40

* 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 data begin with figures for weeks ending Dec. 9, 1922, Dec. 8, 1923, Dec. 6, 1924, and Dec 5, 1925; Vancouver figures are for weeks ending one day earlier.

TABLE V.—INTERNATIONAL TRADE IN WHEAT AND FLOUR, MONTHLY, 1925–26*

(Million bushels)

A.—NET EXPORTS

Month	United States	Canada	India	Australia	Argentina	Chile	Hungary	Jugo-Slavia	Poland	Algeria	Tunis
1925 Aug.	11.2	18.4	.97	4.2	5.9	.10	2.32	.76	(.15)[a]	1.16	.38
Sept.	11.6	18.8	1.10	4.2	4.5	(.03)[a]	3.16	2.01	.53	.53	.13
Oct.	5.9	46.4	.54	2.0	5.3	.02	2.54	1.50	.64	(.03)[a]	.19
Nov.	5.8	40.2	.44	1.8	4.7	(.24)[a]	3.00	1.19	1.05	.53	.15
Dec.	6.2	61.7	.39	2.6	4.4	(.18)[a]	1.29	....	.93	.50	.21
1926 Jan.	4.0	16.4	.62	16.7	6.1	(.06)[a]	1.17	....	.94	...	.09
Feb.	4.2	17.8	.32	14.4	12.1	...	1.09	....	...	...	...
Mar.	6.8	20.5	...	10.5[b]	11.5[b]	...	....	....	...	...	...

B.—NET IMPORTS

Month	Egypt	United Kingdom[c]	France[d]	Germany	Belgium	Italy	Netherlands	Scandinavia	Switzerland	Czecho-Slovakia	Baltic States[e]	Japan
1925 Aug.	.83	12.58	10.36	14.95	3.58	1.68	1.92	2.31	.99	1.17	.72	(.09)[a]
Sept.	1.10	13.99	1.07	6.56	3.31	1.39	2.56	1.32	1.42	1.83	.59	.68
Oct.	1.47	15.63	5.10	.31	3.20	1.88	3.73	1.36	1.55	2.76	.73	1.53
Nov.	1.16	14.30	1.40	1.14	3.84	4.14	2.51	2.65	1.66	3.04	.98	1.04
Dec.	1.18	21.99	1.16	(.16)[a]	2.98	4.97	2.23	1.76	1.86	2.72	1.54	2.76
1926 Jan.	1.08	21.21	.51	(1.81)[a]	....	5.93	1.97	1.16	1.31	.27	.39	2.18
Feb.	1.00	10.96	.66	.52	....	6.26	1.77	1.08	.93	1.02	...	....

* Data from official sources and International Institute of Agriculture.

[a] Net imports (A), net exports (B).

[b] Estimated from Broomhall's shipments.

[c] Excluding Irish Free State. The 1925–26 Irish Free State net imports are as follows in million bushels: Aug., 1.39; Sept., 1.42; Oct., 1.54; Nov., 2.41; Dec., 1.59.

[d] These are International Institute of Agriculture data. They are not entirely adjusted for wheat imported under the decree of December 30, 1924, and are apparently above the true figures. See above, p. 211 n.

[e] Finland, Esthonia, Latvia.

TABLE VI.—WEEKLY WHEAT AND FLOUR SHIPMENTS BY AREAS OF ORIGIN AND DESTINATION, DECEMBER TO MARCH, 1925–26*

(Million bushels)

Week ending	North America	Argentina and Uruguay	Australia	Russia, Danube, and Black Sea	Other Countries	Total	To Europe	To Ex-Europe
Dec. 5	10.50	1.06	.46	.72	1.84	14.57	11.42	3.15
12	9.68	.48	.20	.26	2.16	12.78	10.16	2.62
19	9.04	1.28	.39	.14	2.40	13.25	10.74	2.51
26	7.69	1.30	.36	.09	1.84	11.27	9.19	2.08
Jan. 2	6.83	.85	.66	.06	2.28	10.67	8.58	2.09
9	9.14	.43	2.18	.45	1.72	13.92	10.73	3.19
16	6.66	.66	4.03	.33	2.40	14.08	10.49	3.59
23	8.05	1.66	4.74	.64	2.00	17.09	11.77	5.32
30	8.46	2.13	4.33	.62	1.96	17.50	11.78	5.71
Feb. 6	6.54	2.10	3.26	.50	1.60	14.00	11.14	2.86
13	7.52	3.66	3.98	1.03	.88	17.08	13.02	4.06
20	6.14	2.62	3.78	.17	.72	13.44	9.94	3.50
27	5.23	3.41	2.46	.40	.52	12.02	9.01	3.02
Mar. 6	6.43	3.02	3.46	.62	.44	13.98	9.83	4.14
13	5.26	2.53	2.82	.55	.36	11.52	7.49	4.03
20	5.82	3.34	2.40	.49	.40	12.46	8.30	4.16
27	6.85	2.58	1.83	.56	.36	12.18	9.12	3.06

* 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. German shipments are included.

TABLE VII.—BROOMHALL'S SUCCESSIVE ESTIMATES OF EXPORT SURPLUSES AND IMPORTERS' PURCHASES, 1925–26*

(Million bushels)

Date of report	Available for export	Margin over importers' purchases	Importers' purchases		
			Total	Europe	Ex-Europe
Aug. 4...	744[a]	142[a]	602	506	96
Aug. 18...	752	150	602	506	96
Oct. 20...	840	176	664	552	112
Dec. 1...	592[b]	...	672	552	120
Dec. 8...	768	112	656	536	120
Jan. 12...	736	80	656	536	120
Feb. 16...	764	108	656	536	120
Mar. 16...	758	102	656	536	120
Mar. 30...	750	94	656	516	140

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

[a] Exclusive of India and Chile.

[b] Estimate for Argentina not included.

TABLE VIII.—WEEKLY VISIBLE SUPPLIES OF WHEAT IN NORTH AMERICA, UNITED KINGDOM AND AFLOAT, DECEMBER TO MARCH, 1925–26*

(Million bushels)

Date	United States	Canada[a]	U.K. and afloat	Total
Dec. 5.....	54.7	104.7	39.9	199.2
12.....	53.5	109.7	37.7	200.9
19.....	55.7	116.7	34.8	207.2
26.....	58.3	128.0	35.2	221.5
Jan. 2.....	59.2	126.8	35.5	221.5
9.....	58.5	125.7	35.8	220.0
16.....	57.3	124.1	38.8	220.2
23.....	53.9	123.7	42.0	219.6
30.....	52.7	120.1	43.9	216.8
Feb. 6.....	51.5	116.9	46.4	214.8
13.....	50.4	116.5	51.7	218.6
20.....	49.5	116.4	54.5	220.4
27.....	48.1	115.3	57.6	221.0
Mar. 6.....	46.3	113.5	58.8	218.6
13.....	44.4	111.1	57.6	213.1
20.....	42.2	108.6	56.2	207.0
27.....	40.2	106.8	53.8	200.8

* United States data from *Bradstreet's;* Canadian data from *Canadian Grain Statistics;* U.K. and afloat from Broomhall's *Corn Trade News* and *Price Current-Grain Reporter.*

[a] 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 IX.—VISIBLE WHEAT SUPPLIES ON APRIL 1, 1920–26, WITH PRE-WAR AND POST-WAR AVERAGES*

(Million bushels)

Item	1920	1921	1922	1923	1924	1925	1926	1910–14 average	1921–25 average
U.S., East of Rockies—wheat.....	79.1	40.3	58.1	87.1	95.4	96.3	69.5	69.6	75.5
U.S., West of Rockies—wheat.....	4.6	2.5	4.6	5.4	6.0	3.0	3.5	4.6	4.3
Canada—wheat.....	27.8	40.0	62.0	81.2	123.1	79.8	98.7	36.7	77.2
United States—flour as wheat.....	11.2	8.9	6.7	9.5	9.8	9.5	8.9	9.8	8.9
Canada—flour as wheat.....	.5	.6	1.2	.6	.3	.3	.4	.9	.6
Argentina.....	6.6	3.7	4.8	9.2	10.6	11.4	6.6	4.3	7.9
Australia.....	60.0	73.0	50.0	56.5	40.0	63.0	30.5	14.8	56.5
United Kingdom—wheat.....	7.0	16.9	4.8	5.7	6.8	9.1	7.7	8.9	8.7
United Kingdom—flour as wheat...	3.9	1.5	1.7	2.1	1.7	2.6		3.5	1.9
Afloat for United Kingdom.....	16.1	14.9	19.1	9.3	18.3	12.8	12.1	13.0	14.9
Afloat for Continent.....	31.9	33.0	22.4	28.1	28.5	47.1	16.4	18.8	31.8
Afloat for orders.....	11.7	10.4	24.4	15.4	19.0	24.3	17.4	21.5	18.7
TOTAL NORTH AMERICA.....	123.2	92.3	132.6	183.8	234.6	188.9	181.0	121.6	166.4
TOTAL ARGENTINA AND AUSTRALIA....	66.6	76.7	54.8	65.7	50.6	74.4	37.1	19.1	64.4
TOTAL UNITED KINGDOM AND AFLOAT.	70.6	76.7	72.4	60.6	74.3	95.9	53.7	65.7	76.0
GRAND TOTAL.....	260.4	245.7	259.8	310.1	359.5	359.2	271.7	206.4	306.8
EXCLUDING AUSTRALIA.....	200.4	172.7	209.8	253.6	319.5	296.2	241.2	191.6	250.3

* A joint compilation by Broomhall, the *Daily Market Record,* Minneapolis, and the *Daily Trade Bulletin,* Chicago, here compiled from Broomhall's *Corn Trade News* and the *Daily Trade Bulletin.*

TABLE X.—WHEAT STOCKS IN THE UNITED STATES ON FARMS AND IN COUNTRY MILLS AND ELEVATORS, MARCH 1, 1920–26*

Stocks, in million bushels				Percentages of preceding crop		
March 1	Farms	Other	Total	Farms	Other	Total
1920.....	169.9	123.2	293.1	17.6	12.7	30.3
1921.....	217.0	87.1	304.1	26.1	10.5	36.5
1922.....	134.3	75.1	209.4	16.5	9.2	25.7
1923.....	156.1	102.9	259.0	18.0	11.9	29.9
1924.....	137.7	98.3	236.0	17.3	12.3	29.6
1925.....	112.0	67.6	179.7	13.0	7.8	20.8
1926.....	99.3	75.4	174.7	14.8	11.3	26.1
Average 1911–14..	148.2	101.6	249.8	21.6	14.8	36.4
1921–25..	151.4	86.2	237.6	18.1	10.3	28.4

* Estimates of U.S. Department of Agriculture.

TABLE XI.—WHEAT STOCKS IN CANADA, MARCH 31, 1920–26*

(Million bushels)

March 31	Total	On farms	In transit by rail	In elevators	In flour mills
1920.....	77.3	34.8	6.3	30.6	5.6
1921.....	95.5	48.9	7.1	35.8	3.6
1922.....	115.0	41.6	11.0	58.3	4.0
1923.....	139.8	54.8	8.4	69.6	7.0
1924.....	202.5	70.8	14.1	111.6	6.0
1925.....	121.1	39.2	8.3	73.6	
1926.....	161.4	50.9	8.3	102.2	

* Compiled from official Canadian sources. See especially, *Canada Yearbook*, 1924, p. 223; and Dominion Bureau of Statistics press release, April 15, 1926.

TABLE XII.—AVERAGE DAILY VOLUME OF TRADING IN WHEAT FUTURES IN UNITED STATES MARKETS*

(Million bushels)

Year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Year
1920–21.....	....	....	....	....	....	....	39.1	44.1	39.5	52.5	46.1	49.8	45.2[a]
1921–22.....	45.5	39.6	57.1	54.0	53.7	43.3	36.5	67.9	61.3	48.9	37.4	41.8	48.5
1922–23.....	34.4	36.2	33.5	32.5	37.6	42.1	36.6	37.0	27.9	48.0	41.0	40.9	37.0
1923–24.....	32.3	31.4	28.3	30.2	27.1	21.1	14.3	18.1	22.8	18.0	14.4	34.0	24.2
1924–25.....	53.3	50.0	42.7	61.4	60.9	58.8	73.4	81.0	87.4	59.3	60.3	67.6	62.9
1925–26.....	56.2	60.0	59.0	60.4	65.2	90.3	60.6	58.3	69.0	....	....	....	....

* Data of Grain Futures Administration, U.S. Department of Agriculture. No data compiled for period prior to January 1921.

[a] Six-months' average.

TABLE XIII.—WEEKLY CASH PRICES OF REPRESENTATIVE WHEATS IN LEADING EXPORTING AND IMPORTING MARKETS, DECEMBER TO MARCH, 1925–26*

(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	Pacific White	Argentine Rosafe	Australian
Dec.	1.81	1.71	1.76	1.52	1.66	1.59	1.83	1.93	1.78	....[a]	1.90	1.85	1.91
	1.86	1.73	1.79	1.62	1.51	1.42	1.90	1.91	1.91	....[a]	1.91	....[a]	1.91
	1.80	1.69	1.73	1.52	1.52	1.44	1.82	1.84	1.83	....[a]	1.90	1.92	1.83
	1.79	1.66	1.73	1.49	1.55	1.47	1.91	1.85	1.77	....[a]	1.92	1.82	1.85
									1.88			1.91	
Jan.	1.92	1.81	1.85	1.57	1.57	1.48	1.89	1.90	1.89	....[a]	1.93	1.82	1.90
	1.94	1.80	1.84	1.61	1.59	1.49	1.88	1.91	1.85	1.85	1.90	1.90	1.89
	1.93	1.76	1.78	1.56	1.55	1.45	1.88	1.86	1.85	1.82	1.88	1.72	1.86
	1.93	1.78	1.76	1.58	1.53	1.42	1.82	1.82	1.79	1.79	1.84	1.60	1.82
	1.93	1.78	1.76	1.54	1.57	1.46	1.81	1.85		1.73	1.87		1.79
Feb.	1.91	1.77	1.81	1.59	1.60	1.49	1.84	1.87	1.82	1.79	1.84	1.59	1.84
	1.87	1.71	1.72	1.50	1.54	1.44	1.79	1.81	1.82	....[a]	1.82	1.60	1.79
	1.79	1.67	1.70	1.50	1.52	1.43	1.73	1.73	1.76	....[a]	1.76	1.57	1.73
	1.81	1.70	1.74	1.49	1.48	1.39	1.69	1.76	1.73	....[a]	1.70	1.52	1.73
Mar.	1.71	1.63	1.68	1.43	1.44	1.35	1.60	1.65	1.72	1.55	1.67	1.46	1.63
	1.72	1.63	1.69	1.45	1.51	1.41	1.61	1.75	1.61	1.55	1.69	1.41	1.65
	1.75	1.64	1.71	1.45	1.50	1.39	....[b]	1.76[c]	1.62	....[b]	1.72[c]	1.41	1.66[c]
	1.64	1.56	1.62	1.46	1.52	1.41	....[b]	1.76[c]	1.60	....[b]	1.72[c]	1.43	1.66[c]
								1.78[c]	1.65		1.75[c]	1.47	1.72[c]

* U.S. 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.* U.S. 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.

[a] Not quoted. [b] Data not yet available.

[c] Prices for last three Tuesdays in March from Broomhall's *Corn Trade News.*

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

(U.S. dollars per bushel)

Month	Great Britain			France (Chartres)			Italy (Milan)			Germany (Berlin)		
	1923–24	1924–25	1925–26	1923–24	1924–25	1925–26	1923–24	1924–25	1925–26	1923–24	1924–25	1925–26
Aug.	1.24	1.54	1.53	1.25	1.50	1.62	1.07	1.40	1.88	.90	1.29	1.55
Sept.	1.09	1.45	1.48	1.36	1.54	1.57	1.10	1.49	1.94	.93	1.46	1.38
Oct.	1.08	1.52	1.34	1.39	1.62	1.48	1.12	1.77	1.94	.90	1.47	1.37
Nov.	1.09	1.56	1.45	1.36	1.71	1.37	1.07	1.83	1.99	1.25	1.37	1.49
Dec.	1.14	1.54	1.60	1.34	1.77	1.33	1.09	1.94	2.12	1.11	1.44	1.62
Jan.	1.13	1.66	1.60	1.22	1.87	1.39	1.16	2.21	2.17	1.03	1.64	1.61
Feb.	1.25	1.74	1.54	1.20	1.89	1.42	1.22	2.31	2.18	1.04	1.63	....
Mar.	1.24	1.70	1.51	1.33	1.87	1.40	1.31	2.09	....	1.09	1.63	....
Apr.	1.23	1.58	....	1.55	1.77	....	1.36	1.86	....	1.12	1.60	....
May	1.28	1.64	....	1.46	1.85	....	1.36	1.93	....	1.05	1.70	....
June	1.31	1.67	....	1.40	1.75	....	1.32	1.80	....	.94	1.73	....
July	1.42	1.55	....	1.36	1.64	....	1.26	1.63	....	1.07	1.74	....

* Data converted into U.S. money by monthly average exchange rates from prices in London *Economist* (Great Britain); *International Crop Report and Agricultural Statistics* (Italy); *Wirtschaft und Statistik* (Germany); and data supplied by U.S. Federal Reserve Board (France).

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