SURVEY OF THE WHEAT SITUATION

AUGUST TO NOVEMBER, 1927

The present survey covers the first third of the international crop year—a crucial period in the development of important wheat crops. The events of this period provide a reasonable basis for appraising the outlook for world wheat trade and prices for the crop year as a whole, at least until May, when the progress of new crops begins to exert an influence unpredictable in December. This year the outlook is perhaps somewhat less clear than usual because of uncertainties respecting the crops of Europe and Canada, which were harvested under conditions that render standing crop estimates open to question; but certain conclusions may be drawn with reasonable assurance. Crop statistics, trade, and prices during the first four months, at least after the Canadian crop was secured, bear witness that the present crop year is in most respects normal, conspicuously less eventful than 1924–25 or 1925–26, and somewhat less striking than 1926–27.

In Canada, however, crop developments have been even more pronounced and potent. Seeding was delayed much beyond the normal date, and acreage was slightly reduced. The crop, though planted in soil abundantly supplied with moisture, was subject to exceptional risk of frost damage because of the unusual lateness of sowing. Rust appeared; and throughout August and early September the markets of the world responded sharply to crop and weather reports. Despite extensive damage from both menaces, the harvest proved distinctly large —perhaps smaller only than the bumper crop of 1923, though downward revisions of present estimates are not unlikely. The Canadian crop is of relatively poor quality; there is little grain of the higher grades, and much tough wheat. Nevertheless assurance of the Canadian crop has raised the total for North America to the highest level since the bumper crop of 1915.

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The United States crop of spring wheat turned out of record size for post-war years despite delayed seeding and damage from rust; but the winter-wheat crop proved to be only average. Drought throughout the growing season curtailed the outturn in Australia. Argentina, with a favorable growing and harvesting season and the largest planted area in her history, apparently secured a crop little smaller than the record outturn of 1923. Europe, Russia excluded, apparently has harvested a crop slightly above average in size in spite of a distinctly unfavorable harvesting period in the northwestern countries.

Detailed official data summarized in Table 1 (p. 104), though as yet tentative, indicate a world crop (exclusive of Russia and China) over 100 million bushels larger than that of 1926, and approximately equal to the bumper crop of 1923. Russia, however, has apparently a smaller crop than last year. The Northern Hemisphere (ex-Russia and China) apparently has considerably more wheat this year than last, the Southern Hemisphere slightly less. But the large world outturn can hardly be regarded as much above normal, in view of the upward trend of wheat production and consumption since the war. In distribution between importing and exporting countries, the 1927 crop is about normal, similar to that of 1926 and 1923, and far different from the distribution of 1924 or 1925. As in 1926, bumper crops or crop failures are alike conspicuously absent. Among the several exporting countries, by comparison with 1926–27, the present crop year witnesses smaller crops in the Danube countries, Russia, and the Southern Hemisphere offset by larger crops in North America. On the whole the quality of the world's crop appears neither distinctly good nor distinctly poor, though perhaps on the average not so good as in 1926.

International trade was nearly of record volume in the first third of 1927–28, but the high figure is the less noteworthy in view of normal growth. Certain European importing countries, despite large carryovers out of 1926–27, were forced to purchase large supplies in August–September because of late harvests and damp grain in northwestern Europe. The movement from Canada was delayed by the late harvest, but Pacific Coast shipments from the United States were exceptionally large. Rapid marketing by American farmers, especially of spring wheat, resulted in a heavy accumulation of visible supplies. By the end of November, when the large Canadian crop was moving in great volume, world visible supplies had reached the highest figures in post-war years. Faced with the steady accumulation of supplies, purchasers of wheat and flour showed no disposition to accumulate stocks in advance of requirements, though buying became more active in November.

Wheat prices in the world's principal markets responded sharply to the frost in Canada on August 7, and thereafter declined as the Canadian crop showed favorable progress. By October the level of prices was the lowest for a similar period since 1923. Cash prices in Canada, however, did not reach such low levels relative to preceding years as were recorded in the United States and the United Kingdom, largely because Canadian wheat of the higher grades is at a premium for the second successive year. Toward the end of November, prices in most markets were somewhat below the prices prevailing last year, but not so much lower as in October, when last year's prices were raised by the situation in ocean freight rates. In France and Italy, for special reasons, the August–November period witnessed much lower prices this year than last. In the United States, large crops of hard red spring and durum wheats led to relatively low prices, while soft red winter wheat, in short supply, commanded a premium as in 1925–26.

The international statistical position now appears much easier than in 1924–25 and 1925–26, but not so easy as in 1923–24. Comparisons with 1926–27 are difficult on account of uncertainty respecting crop estimates in both years. On the whole, however, only slight differences are to be observed; the position in 1927–28 is fairly easy, and probably slightly easier than last year. Despite defections in Russia, the Danube countries, and Australia, the exporting countries of the world apparently have slightly larger supplies available for export; and importing countries require a little less wheat. We expect international trade, as measured by net exports, to attain a figure of about 825 million bushels,

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

(Million bushels)

Year	United States	Canada	Soviet Russia	Lower Danube[a]	Other Europe	North Africa	India	Japan, Chosen	Northern Hemisphere ex-Russia	Argentina	Australia	Southern Hemisphere	World ex-Russia
1920.....	833	263	...	172	775	71	378	41	2,550	156	146	350	2,900
1921.....	815	301	...	212	1,004	98	250	40	2,727	191	129	376	3,103
1922.....	868	400	...	224	815	72	367	40	2,801	196	109	354	3,155
1923.....	797	474	...	260	989	106	372	35	3,051	248	125	427	3,478
1924.....	864	262	...	204	847	85	361	37	2,673	191	165	407	3,080
1925.....	676	411	713	305	1,096	105	331	40	2,976	191	115	359[b]	3,335[b]
1926.....	831	410	810	298	909	90	325	39	2,915[c]	221	161	435[b]	3,350[bc]
1927.....	872	444	...	277	977[d]	102	334	38	3,057[cd]	240	115	...	.....
Average													
1909–13...	690	197	759	330	1,018	92	352	32	2,724	147	90	280	3,004
1922–26...	808	391	...	258	931	92	351	38	2,884[c]	209	135	396[b]	3,280[bc]

* Summarized from most recent official data for individual countries (see Appendix Table I), as reported by the U.S. Department of Agriculture, supplemented in a few cases by our own rough estimates. Totals exclude China, Turkey in Europe, Brazil, and a number of small producers. All estimates are for territory within post-war boundaries.

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

[b] Includes our estimate for Peru.

[c] Includes our estimate for Cyprus.

[d] Includes our estimates for Denmark, Esthonia, Scotland, and Ireland.

some 25 million bushels less than in 1926–27 and about the same as in 1923–24, but more than in any other year.

In the present position we see no factors that would materially affect the level of world wheat prices prevailing in November–December. If the present position remains unchanged, the level of world wheat prices, as reflected in cash or futures prices in the United Kingdom and the United States, promises to prove lower this year than last, especially in the United Kingdom, where the advance in ocean freight rates last year raised import prices. Canadian wheat of the higher grades will probably command higher prices this year than in 1926–27. In the United States, the premiums already established on soft red winter wheat and all wheat of high protein content, and lower prices on durum and other spring wheats, will probably continue. Carryovers out of 1927–28 will perhaps be increased somewhat, especially in the United States; but no such increase as occurred last year is likely.

I. CROP DEVELOPMENTS, AUGUST–NOVEMBER

Wheat trade and prices during August–November have been dominated by changes in crop prospects in Canada, where the outturn has proved larger than was expected by the most optimistic in early August. Official estimates of the United States crop were increased slightly during the four months under review. The Argentine and Australian crops, though not yet made, appear to have neither exceeded nor fallen below expectations. No notable changes have been recorded in the crop estimates for India and North Africa. On the whole, chiefly on account of the progress of the Canadian crop, larger world supplies of wheat now appear available than were in prospect four months ago.

The United States

Crop developments in the United States during August–November have had comparatively little market influence, though perhaps slightly more than usual on account of the lateness of the spring-wheat crop and the presence of rust infestation. The official estimate of winter-wheat production has remained unaltered since August, though some private statisticians have reduced their estimates slightly. With respect to spring wheat, the official estimates of 298 million bushels as of August 1 was raised to 308 million as of September 1, and to 314 million as of October 1. Private statisticians (Bryant excepted) did not concur in the September increase; and the official figure took many traders by surprise, since reports had been current that rust infestation had reduced spring-wheat yields during August. The official estimate as of October 1 (issued October 10) also was unexpectedly high; early in the month private statisticians had published estimates ranging from 288 to 300 million bushels, whereas the official figure was 314 million.[1]

According to the official estimate now standing, the United States wheat crop reaches 872 million bushels, 41 million larger than the crop of 1926. A distinctly larger crop has not been harvested since those of 1918 and 1919. In continuation of an upward trend in the past four years, the area harvested, 58.6 million acres, is larger than in the preceding three years, though smaller than in 1918–23. Yield per acre, 14.9 bushels, is the highest in post-war years except 1924, with spring-wheat yields relatively higher than winter. The production estimate, however, cannot be unreservedly accepted. Significant evidence indicates that the crops of 1925 and 1926 were underestimated by 30 million bushels or more;[2] on the other hand, competent observers regard the 1927 estimate, in total, as too high. It is at present impossible to adjudge the facts precisely; but the December official estimate was this year supplemented by half a million questionnaires sent directly to farmers, and this procedure may have tended to correct a possible bias existing in 1925 and 1926.

[1] The course of official and private estimates of spring-wheat production, in million bushels, was as follows:

Date	Official	Bryant	Cromwell	Murray	Snow
Aug. 1..	298	274	288	300	309
Sept. 1..	308	284	281	286	294
Oct. 1..	314	288	290	288	300
Dec. 1..	319	...	312	294	...

[2] See Wheat Studies, IV, 19.

The significant features of the distribution of the 1927 crop by classes[1] are the huge outturns of durum and Pacific white wheats, the exceptional outturn of hard red spring, and the poor crop of soft red winter. The crop of hard red winter is well above average in size, but much smaller than the huge crop of 1926. In quality the crop as a whole is apparently above average. Weight per measured bushel of winter wheat is reported as 58.6 pounds as against a 10-year average of 58.2; of spring wheat, the 1927 figure is 58.3 pounds as against a 10-year average of 57.1. Yet, according to official data in which a figure of 100 represents a crop of high medium grade, the winter-wheat crop is below the 10-year average (88.5 as against 90.1), though the spring-wheat crop is above (88.1 as against 86.5). Winter wheat is considerably poorer this year than last in both weight per bushel and protein content; spring wheat is perhaps better in weight, but probably lower in protein content.[2] Rather large quantities of wheat were damaged by excessive rains at harvest in parts of the Great Plains, and also in the Pacific Northwest; but the United States crop as a whole is this year exceptional among other large Northern Hemisphere crops for its comparative freedom from damp grain.

[1] See Appendix Table IX in WHEAT STUDIES, IV, 49. The distribution there shown does not apply to the December official estimate; but corrections will probably not alter the broad facts.

[2] Data apart from the U.S. Department of Agriculture's estimates of test weight are not available for the spring-wheat crop as a whole. For North Dakota, the leading producer, the following figures have been issued by C. E. Mangels *et al.*, in *North Dakota Agricultural Experiment Station Bulletin 213*, November 1927, p. 5:

Crop of	Common wheats		Durum wheats	
	Test weight *(lbs. per bu.)*	Protein content *(per cent)*	Test weight *(lbs. per bu.)*	Protein content *(per cent)*
1924	60.9	11.33	....	.....
1925	58.8	12.30	....	.....
1926	59.1	14.23	61.3	14.08
1927	57.7	11.82	60.1	11.21

According to these data, protein content in 1927 is much lower than in 1926, though fully average. But the figures above do not agree with the official data on test weights, which are 57 rather than 59.1 pounds in North Dakota in 1926, and 58 rather than 58.3 pounds in 1927. The official data, while less accurate for specific samples, presumably disclose the broad facts better than the experimental data, which were necessarily based upon a narrower range of samples.

[3] According to the final crop report of the Canadian Pacific Railway, issued November 14, threshing was complete in Manitoba, 95–100 per cent complete in Saskatchewan, 90–95 per cent in northern Alberta, and 75–80 per cent in southern Alberta.

CANADA

The vicissitudes of the Canadian crop dominated the world's markets practically throughout the period under review. Seeding was greatly delayed in the spring, rust appeared in the summer, and harvest was inevitably late. The possibility of serious frost damage before the crop could mature was more of a menace than usual. During August, rust did considerable damage in Manitoba and eastern Saskatchewan; and a frost occurred on August 7. Beyond question the wheat plant was seriously damaged over a fairly wide area, but even at present the effects are not measurable. An ample supply of subsoil moisture, good rains during the growing season, and weather cool enough to prevent excessive damage from rust were factors which proved sufficiently favorable to assure a large crop despite the ravages of frost and rust. Cutting was practically complete by the end of September, despite much interruption from rain. Threshing was seriously interrupted by rain and some snow in the first two weeks of October. In mid-November winter weather put a stop to threshing before all wheat was removed from the fields, especially in southern Alberta.[3]

In view of the good supply of subsoil moisture and the favorable weather of July, observers were anticipating a distinctly large crop in Canada, 400 million bushels or more, as early as August 1—always on the assumption that early frost would not occur. Yet the late seeding and consequent danger of frost damage led traders in general to believe that the chances were against a large crop; and the conviction, supported by the frost of August 7, was only gradually weakened, to be finally reversed as the crop approached maturity. Private statisticians on September 1 were forecasting the outturn of the Prairie Provinces alone between 400 and 434 million bushels, well above their August 1 estimates despite the frost; and the official figure of 459 million bushels for all Canada as of September 1 (issued on September 12) was higher still.

The rainy weather throughout September and early October, and unfavorable threshing returns from some districts, gave rise to a reduction of 14 million bushels in the November official estimate. Reductions of 4.7 and 18.2 million bushels respectively in the estimates for Manitoba and Saskatchewan were partially offset by an increase of 9.7 million for Alberta. The crop of Alberta now appears to be much the largest in her history.

Although reputable estimates now standing range only from 425 to 450 million bushels,[1] the size of the crop is still uncertain. The final official estimate will not appear until January.[2] An unknown quantity of wheat still remains unthreshed; on the other hand, the final official estimates appear to have been appreciably below the truth for four years past, and may prove so again. But the Canadian crop is clearly of large size, probably the largest ever harvested except for the huge crop of 1923.

In quality, however, the Canadian crop is apparently poor, even by contrast with the crop of 1926. Table 2 provides comparisons in detail. The official estimate of quality as of September 30 gave a figure of 97 per cent as compared with 96 per cent in 1926, but during September–November only 1.7 per cent of the inspections of the Western Division has graded No. 1 Northern Manitoba, and only 10.1 per cent No. 2. Even last year, when these grades were distinctly scarce, the proportions were higher. There is perhaps less tough wheat this year than last; but there is an exceptionally large proportion of the straight grades No. 3 and below. Wheat entirely unfit for milling—rejected, feed, and condemned—is not, however, present in unusual quantity. Frost and rust clearly reduced grades in all three of the Prairie Provinces, though apparently less in Alberta than elsewhere. It is further reported that Canadian wheat is lower than usual in protein content. The significance of low grades is somewhat diminished by the fact that millers are able to fan out frosted kernels light in weight, thus obtaining a residue of milling wheat of high quality.

TABLE 2.—PERCENTAGES OF VARIOUS GRADES OF CANADIAN HARD RED SPRING WHEAT TO TOTAL WHEAT INSPECTED IN THE WESTERN DIVISION, SEPTEMBER–NOVEMBER 1923–27*

	1923	1924	1925	1926	1927
No. 1 Northern...	40.2	22.8	28.4	14.1	1.7
No. 2 Northern...	24.6	19.8	30.8	24.2	10.1
No. 3 Northern...	20.5	19.1	13.7	9.3	24.2
Nos. 4, 5, 6 Northern	9.0	27.1	4.2	4.7	20.2
Feed, etc.[a].....	3.7	1.6	1.7	.7	1.3
No grade[b].....	1.1	7.2	17.8	38.4	36.1
Total above.....	99.1	97.5	96.6	91.4	93.6
Total inspections.	100.0	100.0	100.0	100.0	100.0

* Data from *Canadian Grain Statistics.*

[a] Includes also rejected, condemned, and no established grade.

[b] Wheat containing a higher proportion of moisture than wheat of numbered grades. Aside from higher moisture content, it may be of as good quality as the numbered grades, and is always better than feed, rejected, or condemned wheat.

EUROPE

Crop developments in Europe during August–November have naturally varied from country to country. On the whole, the harvesting and early threshing season was distinctly unfavorable in most of the countries where wheat is harvested in late August and in September; and the European crops in the aggregate now appear somewhat smaller than seemed probable in August. But notable reductions of crop estimates have been made only in Italy, Roumania, and Jugo-Slavia. Other European countries have harvested crops as large as was earlier expected; but larger quantities of the harvested crops in northwestern Europe are unfit for milling than appeared probable as harvest began.

Most of the countries of central and eastern Europe harvested distinctly good crops. Greece, Bulgaria, Hungary, Austria, Poland, and Czecho-Slovakia secured outturns not

[1] The latest official and unofficial estimates, for the Prairie Provinces only, are as follows, in million bushels:

Manitoba Free Press (September 17).....424
Bryant (October 1).....400
Cromwell (October 1).....422
Murray (October 1).....417
Northwestern Grain Dealers' Assn. (October 1) 409
Official (November 1).....419

[2] The final estimate, however, has not differed from the October 31 estimate by more than 11 million bushels during the past six years. See Appendix Table XI, WHEAT STUDIES, IV, 50.

greatly inferior to the record post-war crops of 1925, and well above those of last year. Roumania and Jugo-Slavia, however, apparently suffered from dry weather in the growing season. The Roumanian crop of 97 million bushels is of mediocre size, and 14 million bushels less than in 1926; the Jugo-Slavian of 57 million is the smallest since 1922. In the Danubian states, Austria, and Greece, quality is said to be excellent; Hungary in particular has the best wheat in post-war years.[1] In more northerly countries quality is probably relatively poorer, but still good. None of these countries experienced the unfavorable harvesting weather common to western Europe.

The important Italian crop is now officially estimated as of only 196 million bushels, the smallest in the past five years except 1924.[2] An earlier official estimate placed the crop at 215 million bushels, but storms, hot winds, and drought during the late growing season apparently did more damage than had earlier been supposed. Quality, however, is said to be excellent. The Spanish crop, of which little is known, is apparently, like the crop of 1926, about of average size, and considerably below the good outturns of 1923 and 1925.

The volume of wheat production in the British Isles, France, Holland, Belgium, Germany, and Scandinavia is less certain. These countries suffered from excessive rainfall practically throughout late August and September, though there were of course spells of satisfactory harvesting weather, notably in the first third of September. Apparently English farmers encountered the greatest difficulties, German the least. Some grain was lost by shedding in the fields, some by sprouting; and much wheat was stacked, or garnered, or threshed while unfavorably damp. Harvesting operations in general were delayed, and crops had reached maturity later than usual on account of a cool and wet growing season. According to official estimates current in early December, the countries of northwestern Europe have secured a wheat crop of about 490 million bushels, the second largest crop of the past five years, some 70 million larger than the crop of 1926, but 65 million below the large crop of 1925. The increase over 1926 is due chiefly to the larger crop in France, which is officially estimated at 284 million bushels as compared with 232 million last year. Last year's figure, however, appears somewhat too low; and the accuracy of the estimate for 1927 remains to be seen.[3] According to official data, the German crop of 114 million bushels is slightly the largest of post-war years except 1925, and 18 million larger than in 1926.[4] Some German wheat was unmillable in 1926; a still larger amount is apparently unmillable this year. Nevertheless it seems probable that the countries of northwestern Europe harvested larger crops of sound wheat than in 1926, though probably not 70 million bushels more, as the official data would indicate when uncorrected for a probable understatement in 1926 or for unmillable wheat in 1927. It is to be remembered, however, that the wheat crops of 1926 were by no means of good quality in northwestern Europe, France excepted.

For Europe (ex-Russia) as a whole, the wheat crop of 1927 is thus of rather better than average size, distinctly larger than the crops of 1922 and 1924, distinctly smaller than the crop of 1925, and not far different

[1] An interesting and heated discussion appears in Hungarian newspapers regarding the relative quality of Hungarian and North American wheats. Importers of Hungarian wheat insist that even this year's crop of excellent quality is no more satisfactory for milling and baking purposes than No. 3 Northern Manitoba or No. 2 Hard Winter. Many Hungarians feel that it is equal to No. 1 Northern Manitoba, and ought to command equally high prices; and the press is filled with comments on the general "conspiracy" of consuming countries to depress Hungarian wheat prices.

[2] Some observers, however, regard all Italian crop estimates issued after the opening of the "Battaglia del Grano" in 1925 as over-optimistic. Checks on the estimates are not yet feasible; and for the present the official figures must be accepted.

[3] For evidence of an official underestimate of the French crop of 1926, see WHEAT STUDIES, IV, 44. It is of interest to observe that private estimates of the 1927 crop range higher than the official. The estimate of the *Bulletin des Halles*, usually a reliable authority, is for 292 million bushels, of which 18 million bushels is regarded as unfit for milling. M. Ernest Sicot's estimate, issued September 12, was for 329 million bushels of sound wheat. It is of interest to observe that M. Sicot has since been indicted under article 419 of the penal code. In view of the negligible opposition registered to an advance of the tariff from 18.2 to 35 francs, the low level of French prices, and the official underestimate of the crop of 1926, we are disposed to assume that the official estimate for 1927 is conservative rather than liberal.

[4] A revised estimate of the Prussian crop, issued early in December, suggests that the German crop somewhat exceeds 114 million bushels.

from the crops of 1923 and 1926. The European supply situation of 1927–28 is easier than in 1926–27, partly because carryovers into 1927–28 were on the whole the larger of the two, and partly because crops of the principal wheat substitutes, rye and potatoes, are much larger. According to official data summarized in Table 3, the European

TABLE 3.—EUROPEAN (EX-RUSSIAN) GRAIN AND POTATO CROPS, 1920–27*

(Million bushels)

Year	Wheat	Rye	Potatoes	Corn	Barley	Oats
1920.....	947	532	3,351	520	551	1,478
1921.....	1,216	758	3,078	393	566	1,509
1922.....	1,039	713	4,803	426	602	1,542
1923.....	1,249	824	3,864	475	668	1,814
1924.....	1,051	651	4,216	591	577	1,622
1925.....	1,401	938	4,756	627	694	1,794
1926.....	1,208	746	3,835	663	691	1,913
1927.....	1,253	830	4,514	488	671	1,840
Average						
1909–13...	1,348	976	4,162	528	701	1,931
1922–26...	1,190	774	4,295	556	646	1,737

* Summarized from most recent official data for individual countries, as reported by the U.S. Department of Agriculture. Excludes a few minor European producers. Pre-war averages are estimates for territory within present boundaries, and include 2-year or 4-year averages for a few countries. Figures for 1927 partially estimated.

rye crop exceeds that of 1926 by over 80 million bushels,[1] and the potato crop of 1927 is nearly 680 million bushels larger than last year's. Current estimates, however, may be revised downward, since the unfavorable weather affecting wheat harvest was injurious to rye and potatoes as well. Corn is a poor crop this year, principally in the Danube countries where drought reduced yields, and outturns of barley and oats, though well above average, fall below those of 1926.

Official estimates of Russian crop production have not yet appeared, and the situation is not clear. Despite a large acreage and favorable reports during the growing season, collections of grain[2] have run smaller than in 1926; and wheat exports also, so far as their volume is indicated by Broomhall's shipments data, have been small. These facts suggest either smaller wheat crops than were harvested in 1925 and 1926, or unwillingness of farmers to part with their grain at current prices, or probably both factors combined. On the other hand, there have been no reports of distinct shortage of grain supplies. Observers are agreed that heavy exportation from Russia is unlikely to occur in 1927–28, and crop developments in Russia have exerted negligible market influence this year.

[1] An official revision of the Prussian estimate of rye production, issued early in December, gave a figure about 15 million bushels lower than the earlier estimate.

[2] Separate reports for the several grains have not been issued.

[3] Official estimates of wheat acreage have been raised from 19.45 million acres in August to 19.70 million in November.

SOUTHERN HEMISPHERE WHEAT CROPS

Crop developments in the Southern Hemisphere during August–November were on the whole less noteworthy and of less influence on international markets than in the two preceding years. In both Argentina and Australia the sowing of wheat in April–June was hampered by drought. Nevertheless late rains permitted a record area to be sown in Argentina,[3] and the area sown in Australia fell only 60 thousand acres below the record figure of 1926.

It early became apparent that the Australian crop would prove relatively small. Rainfall was deficient even in August except in Western Australia; and September, when good supplies of moisture are apparently essential to heavy wheat yields, was a month of light precipitation in all states, though Western Australia was again favored. Early unofficial forecasts of production ranged approximately between the low figures of 95–110 million bushels. October and November were months of heavier rainfall, but observers agreed that only a small crop could be harvested, and estimates were raised but slightly. The first official forecast of the crop, issued early in October, was for a crop of 115 million bushels. According to present indications, the crop falls far below the large crops of 1926 and 1924, but it equals the crops of 1925 and perhaps 1923. As harvest progressed in December, unofficial observers tended to increase their estimates further; and official revisions appear more likely to be above than below the estimate now standing. Of the several states, Western Australia has an excellent crop; production is relatively the lowest in New South Wales.

The Argentine crop matured under approximately normal conditions. The winter was abnormally warm. Rainfall was light, but not exceptionally so, during most of August and September. Toward spring, in late September and October, the moisture supply was ample. Spring came slightly late, and consequently the maturity of the crop was somewhat delayed. Frosts occurred in some regions on November 7, giving rise to some uneasiness in foreign markets; but wheat was not damaged in the particular areas visited.[1] November weather was favorable for maturing the crop, despite some complaints of rust infestation. Harvest began in the earlier regions a little after Mid-November, somewhat later than usual. The official estimate of production, issued December 16, was for 240 million bushels. European traders had apparently counted on a crop of about this size, though American traders had expected a lower figure. If the current estimate proves accurate, a larger crop has not been harvested except in 1923. But the good outturn has resulted from large acreage rather than high yield per acre.

On the basis of official forecasts, Australia and Argentina combined have harvested a crop of 355 million bushels, some 27 million below the record outturn of 1926. The quality is unknown, but harvesting weather in both countries has apparently been such as to result in wheat of average quality or better. Early threshings in Argentina have shown high test weight per bushel.

II. MARKETING AND STOCKS

Delayed crops and the wet harvesting weather made for a restricted movement of wheat from farms to markets in northwestern Europe and Canada in the early part of the period under review. Thereafter the movement became very heavy, principally because farmers sought to dispose of damp grain. In Europe the movement has differed from country to country; but the liberal marketings in Italy and France have been of special significance. In the United States farmers have apparently marketed with unusual freedom. By the end of November commercial stocks of wheat ran very high practically throughout the Northern Hemisphere, in part because the marketings were large, but in part because purchasers of wheat and flour, faced with ample supplies and declining wheat prices, have not hastened to accumulate stocks.

European Marketing

During August–November the movement of wheat from farm to market in European countries is of marked significance in its effect upon prices of domestic wheats. In countries like Germany, France, and Italy, where high tariffs are in force but where native crops provide the major portion of the annual wheat supplies, heavy autumnal marketing will occasionally depress domestic wheat prices below the prices of imported wheat, duty paid, though the domestic crop may not be large enough to maintain this relationship for more than a few months of the year. Restrained marketing, on the other hand, may result in relatively high prices for domestic wheat for a few weeks or months. In general, European wheat producers, like producers in all other countries, market the bulk of their wheat in the months immediately succeeding the harvest; but, perhaps because grain is commonly stored under cover, unthreshed, the seasonal course of marketing in European countries apparently varies from year to year more widely even than it does in North America.

Although statistical information is deficient and little can be said with assurance, it appears that in practically all continental countries farmers have been dissatisfied with prices this year; and except for early heavy offerings of damp grain in northwestern Europe and of sound grain in Italy, the movement from farms has not been notably rapid. This is in sharp contrast with last year, when high ocean freight rates in October and November led millers to seek for domestic wheat, and the course of prices was upward rather than downward.

Italian farmers were apparently somewhat inclined to restrict their offers in July and early August, and loans by banks on

[1] *Times of Argentina*, November 7, 1927, p. 20.

stored wheat may have facilitated holding for a time. But the outward carryover of old-crop wheat was large, and in mid-August, with declining world prices, marketings became heavy and continued so into November. The heavy receipts depressed prices below the prices of import wheat and Italian farmers have been dissatisfied.

In northwestern Europe, where the crop was late, marketings were naturally small in August in all countries. Subsequently, at least in France, Germany, Holland, and Belgium, marketings were distinctly large for several weeks. Farmers wished to dispose of their damp grain as rapidly as possible rather than run the risk of spoilage. In France the quantities marketed in September and October appear to have been abnormally large, perhaps in part because large carryovers of old-crop wheat swelled the total; by mid-October the Producers' Association pointed out that farmers themselves were largely to blame for current low prices, and advised producers to allow their wheat to dry, and to market more slowly. The advice respecting marketing policy apparently had slight effect, for despite the preoccupation of farmers with fall plowing and seeding, offers seem to have continued liberal until the increase of the tariff to 35 francs on November 18. In November the quality of the wheat offered was considerably better than in earlier months, and stocks remaining in farmers' hands by December 1 probably consisted of sound wheat. By mid-November millers were finding the domestic wheat satisfactory for milling. As in France, the early heavy marketings in Holland, Belgium, and Germany consisted largely of damp grain. In these countries liberal offers did not begin until late September and October, since harvest was later; and the pressure of offers appears to have been less noteworthy than in France.

In England, where the proportion of damp grain was perhaps even larger than elsewhere, farmers' deliveries were small throughout all of August–November. As the following figures in thousand bushels show,[1] only two-thirds as much domestic wheat had been marketed during these months as in 1925 and 1926, when crops were about the same size.

To end of	1924	1925	1926	1927
Aug.	277	1,266	235	339
Sept.	1,491	4,140	2,739	1,756
Oct.	3,882	6,675	5,753	3,503
Nov.	4,737	9,552	9,545	6,007

It is of interest to observe, however, that deliveries in 1924 were smaller still. In that year also an exceptionally large portion of the crop was injured by wet weather at harvest.

In Hungary trade reports mention decided reluctance among farmers to part with their good wheat, and current discussions of a "conspiracy" among importers to pay less for Hungarian wheat than for North American wheats of similar quality may have fostered the tendency. In Jugo-Slavia, where the crop is short, farmers are reported to have restrained their offers in the expectation of better prices. In both countries, and in Roumania as well, stocks were said to be large early in November; but this may have been due to slow exportation rather than heavy marketing. In Spain, producers are reported to have marketed slowly.

North American Marketing

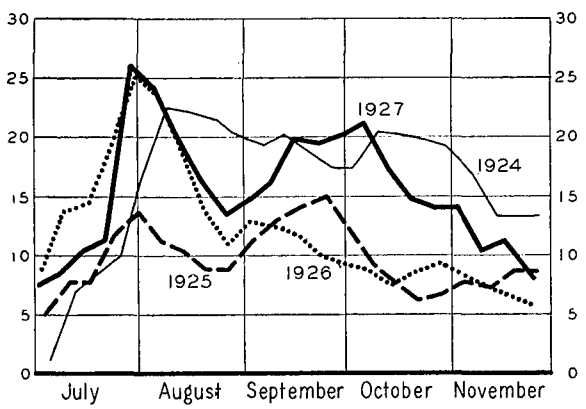
For the second successive year, American marketings of winter wheat were exceptionally heavy in July. This year, as appears from Chart 1 (p. 112), the movement began in volume somewhat later than last year, when the crop in the southwestern states was larger. Increasing use of the harvester-thresher "combine" apparently has advanced the effective maturity of the winter-wheat crop east of the Rocky Mountains, and perhaps the spring-wheat crop; the movement in July 1926 and 1927 contrasts sharply with the movement in 1924 and 1925. In view of the smaller winter-wheat crop east of the Rockies this year, the high peak of receipts at the end of July is especially noteworthy. This year farmers have apparently marketed even more freely than last. Spring wheat was also marketed promptly and freely; larger receipts this year than last in September–November were due chiefly to the larger spring-wheat crop, but farmers showed no disposition to hold back their wheat. Declining receipts

[1] Data from Broomhall's *Corn Trade News*.

in October were apparently due as much to a spell of exceptionally mild weather permitting field work, as to dissatisfaction with prices.[1] Producers of both winter and spring wheat have probably sold their wheat freely this year because prices tended downward; in 1924, when marketings were also large, financial pressure was a more important factor.

CHART 1.—WEEKLY WHEAT RECEIPTS IN PRIMARY MARKETS IN THE UNITED STATES, JULY–NOVEMBER 1924–27*

(Million bushels)



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

From July to November, receipts at primary markets this year totaled 336 million bushels, the highest figure since 1924.[2] But comparisons are not especially significant, since receipts at primary markets on the Gulf or in the Pacific Northwest are not included in available statistics. Consequently the receipts figures shown in Chart 1 and Appendix Tables II and III do not indicate with precision the volume or course of the movement of wheat from farms in the United States as a whole. If data for receipts in these areas were available, it is probable that neither the seasonal course nor the total receipts would show such marked differences between the years 1924, 1926, and 1927 as now appear. This year the crop in the Pacific Northwest was about a fourth larger than in 1926, and indeed the largest since 1923.[3] Farmers are reported to have marketed this wheat rapidly, particularly because much grain was moist; and exports have run high.[4] For the United States as a whole, there is reason to suppose that the marketing movement July–November has been quite as large as the crop permits, and unusually rapid. Murray estimates that 72.8 per cent of the marketable wheat of the 1927 crop had been moved from farms by December 1, as compared with a normal of 67.1 per cent;[5] and the estimate appears reasonable despite a lower figure of receipts at primary markets in 1927 than in 1924.

In Canada, as in western Europe, the harvest was late and threshing operations were impeded by stormy weather. Receipts at country elevators in the Prairie Provinces did not exceed 7 million bushels until the last week in September—a figure smaller than receipts for the first week in September 1925 or the second week in September 1926, when harvest was also delayed. Receipts at Fort William and Port Arthur[6] continued far below normal until the second week of October; for the month of September 1927, only 8.6 million bushels were received, as against 32.8 million in 1926, and 45.7 million in 1925, though the crop exceeded 400 million bushels in each of these years. In October the movement from farms was moderately large; but the full size of the Canadian crop appeared only in November, when receipts at Fort William and Port Arthur were 71 million bushels, the largest since the bumper crop of 1923. On account of the restricted marketings in September and early October, however, the total receipts for the period August–September were the lowest in the past five years except 1924, when the crop was short. In spite of the huge crop in Alberta this year, receipts at Vancouver and Prince Rupert have not yet been large. The movement to the Pacific Coast will presumably increase in the winter months, not only because large quantities of wheat are available, but also because freight rates to the coast have been lowered.

By contrast with the relatively small total

[1] See *Northwestern National Bank Review* (Minneapolis), November 15, 1927.

[2] See Appendix Table II.

[3] See Appendix Table IX in WHEAT STUDIES, IV, 49.

[4] See below, p. 118, note 1.

[5] Monthly circular of Clement, Curtis & Co. (Chicago), December 8, 1927.

[6] See Appendix Tables II and III.

receipts, it is of interest to observe that stocks at the end of November in all positions were slightly higher even than those of 1926, when the situation in ocean freights had restricted the export movement. The data appear in Table 4. This year's figures

TABLE 4.—CANADIAN GRAIN IN STORE LATE IN NOVEMBER, 1923–27*

(Million bushels)

Last week in November	Total	Country elevators West. Div.	Interior elevators	Vancouver elevators	Fort William, Port Arthur	U.S. lake and Atlantic ports	Public elevators in the East
1923...	101.6	52.7	.5[a]	.8	19.8	16.3	11.5
1924...	73.7	24.3	2.5[a]	1.3	25.6	9.8	10.2
1925...	102.6	45.3	5.1	4.7	19.9	10.7	16.9
1926...	114.7	35.1	6.9	6.7	29.8	21.7	14.5
1927...	115.6	45.3	6.4	5.8	18.5	23.9	15.7

* Compiled from *Canadian Grain Statistics*, and adjusted to bring figures for country elevators in Western Division into the proper week. Stocks at Prince Rupert included in Vancouver figures.

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

are relatively high chiefly because November receipts were so large. That the movement from farms was delayed this year, especially by contrast with 1925, is evident from the large stocks reported in country elevators. On the other hand stocks at the terminals in Fort William and Port Arthur have been kept relatively low, while wheat has apparently been moved rapidly to positions in the United States. Thus far less congestion of terminal elevators with damp wheat has occurred this year than last.

VISIBLE SUPPLIES

The weekly course of the principal elements in visible supplies is shown in Chart 2 (p. 114), with comparisons for the three preceding years. As in 1926, the United States visible (Bradstreet's) reached its low point earlier than usual, at the end of June. The increase in July was not so rapid this year as last on account chiefly of a smaller winter-wheat crop and somewhat less favorable harvesting weather; but during August and September the course of visibles differed little between the three years 1924, 1926, and 1927, when crops were much larger than in 1925. During October and November marketings of spring wheat swelled the visible this year as compared with 1926, when the spring-wheat crop was much smaller. This year the visible has apparently been kept at so high a level partly by relatively restricted purchases of wheat by mills. Millers have not been encouraged to lay in stocks, because flour sales have been slow. According to our estimates of total flour stocks,[1] July stocks were about at the usual level for the month. But in August they were about a million barrels below the usual seasonal level; in September they were about 2 million barrels below; in October, some 3 million below; and in November, about 4 million below. Flour buyers, faced with falling prices, have followed the common practice of restricting purchases on a falling market; and millers have apparently restricted their purchases of wheat accordingly.

Canadian visible supplies continued relatively high in August, since the carryover had been abnormally large. The low point was reached later than usual in September because the crop was late; and by comparison with the two preceding years, visibles in late September and October ran low on account of the late crop and unfavorable harvesting weather. In late October and November, as huge quantities of wheat were marketed, visibles increased with great rapidity. It is of interest to observe that thus far in the year, despite a crop estimated larger than that of 1925 and 1926, visibles have not reached notably higher levels. Exports have moved out rapidly, and receipts from the interior were not so large as the large crop presumably would have permitted under normal weather conditions. In view of the size of the Canadian crop and the relatively small proportion of it moved from farms up to December 1, it is possible that Canadian visibles may reach a mid-winter level comparable to the record level of 1923–24, when early in January the figure exceeded 140 million bushels.

Visibles afloat and in ports of the United Kingdom ran high throughout August and September, especially by contrast with 1926, when much less wheat was moving from the Southern Hemisphere, and the situation in ocean freight rates was beginning (at least after mid-September) to restrict ship-

[1] See Appendix Table VI.

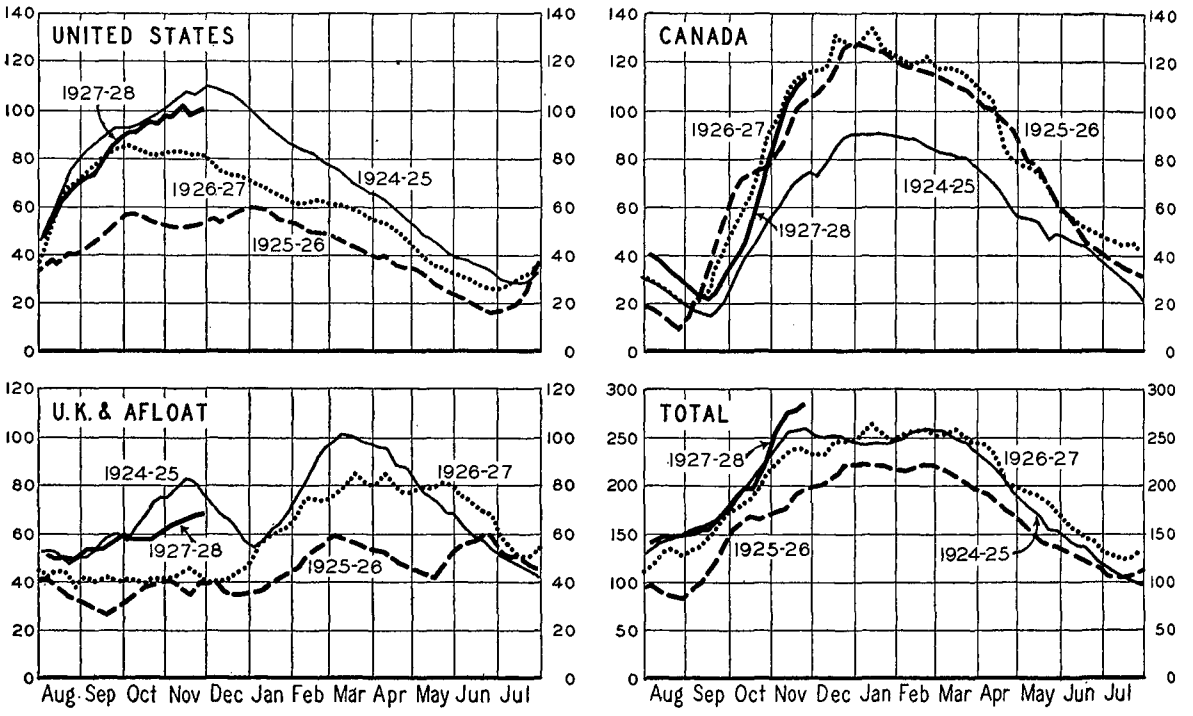
ments. Much higher figures in October and November this year than last are explained by the restricted shipments of last year resulting from the ocean freight rate situation.[1] The figures for 1927 throughout the four months under review have run higher than in any year of the past six except 1924, when shipments in late October and early November reached record heights for the season, on account of a marked shortage of supplies in Europe.[2] Stocks in ports of the United Kingdom have been fully double the size of stocks last year.[3]

Total visible supplies throughout August–November have been as large as in any of the past five years.[4] Toward the beginning of November, indeed, as Canadian stocks began to rise rapidly, the figures reached unprecedented heights, and increased further in the course of the month. The month of November apparently witnessed the largest accumulation of visible supplies since the war. The combined statement of world visibles on December 1, which includes other stocks than those shown in Chart 2, gave a figure of 347 million bushels in 1927, as compared with 326 million in 1924, when stocks were at their previous high level.[5] This is due primarily to the huge crop in North America. In other postwar years, while either the United States or Canada has had a larger crop, the combined output has not been so large; and the North American visible of course constitutes by far the largest proportion of world visible supplies in the autumn months.

In continental Europe as well, stocks of both imported and domestic wheat are said to be large.

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

(Million bushels)



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

[1] See WHEAT STUDIES, III, 154 f.

[2] See Chart 3, p. 116.

[3] See Appendix Table V.

[4] See Appendix Table V.

[5] Cf. Chart 6 in WHEAT STUDIES, III, 106, which shows the course of visibles in 1923–24.

With visible supplies so large, purchasers of wheat and flour, the world over, have felt in a comfortable position. Although liberal purchases have been made, there has been no rush to accumulate supplies. Business has been described as dull; but it has apparently been dull not in the sense that trade or consumption has been of small volume, but merely in the sense that purchasers have had no incentive to provide their requirements far in advance. A similar situation prevailed in 1923–24.

III. INTERNATIONAL TRADE, AUGUST–NOVEMBER

The volume of international trade in wheat and flour during the first third of the crop year was nearly of record size. Total shipments for the first 17 weeks, according to Broomhall's data summarized in Table 5,

TABLE 5.—INTERNATIONAL WHEAT AND FLOUR SHIPMENTS (BROMHALL), AUGUST–NOVEMBER, 1921–27*

(Million bushels)

Aug.–Nov.	To Europe				To ex-Europe	Grand total
	To U. K.	To Continent	To orders	Total		
1921.....	56.0	97.5	31.1	184.6	32.8	217.4
1922.....	55.9	112.3	21.0	189.2	29.6	218.8
1923.....	59.2	97.6	20.7	177.5	44.4	221.9
1924.....	66.5	114.0	47.8	228.3	26.7	255.0
1925.....	50.0	94.4	22.3	166.7	40.8	207.5
1926.....	54.2	117.2	24.9	196.3	36.5	232.8
1927.....	60.1	130.0	30.7	220.9	31.1	252.0

* Shipments are for 17 weeks, from Broomhall's *Corn Trade News*.

reached 252 million bushels, only 3 million bushels below the previous record for the period established in 1924. Shipments data understate the movement; for some wheat moving by rail and by river, especially from the Danube countries and Russia, is not recorded in full.[1] By contrast with 1926, trade was heavy this year largely because no such restricting influence as abnormally high ocean freight rates were operating, but also because European harvests were even later this year than last and the larger proportions of damp grain created a greater need for dry wheat. It is scarcely to be supposed that August–November trade this year will prove to have constituted so small a proportion of the year's total as was the case in 1926–27, when only 28.6 per cent of the year's shipments had been exported in the first third of the year. Ordinarily the movement of the first four months constitutes 32–35 per cent of the total.[2] By contrast with earlier years the heavy movement of 1927 appears less noteworthy if allowance is made for normal growth of international trade.

The course of trade, as shown with comparisons for earlier years in Chart 3 (p. 116), has presented few peculiarities; trade in the three preceding years presented more noteworthy features. September shipments (Broomhall's data) were perhaps larger than might have been expected in view of the sizable inward carryover in Europe; but the late and wet harvest necessitated heavy imports. American journals have characterized export demand as quiet practically throughout the period, and European journals have frequently commented upon the dullness of trade in import markets. The shipments data indicate, however, that trading has been of large volume, if quietly conducted. In November, purchasing appears to have been more active than in earlier weeks.

DISTRIBUTION OF IMPORTS

An altogether satisfactory insight into the distribution of imports cannot be obtained. Statistics of net imports of European countries for November are not yet available, nor of ex-European countries other than Japan and the four North African countries for any month. Export data, either official or Broomhall's, are unsatisfactory because of the large quantities of wheat and flour recorded as shipped to orders rather than to countries of destination. Nevertheless certain significant comparisons are possible.

As appears from Table 5, the August–November shipments to Europe were larger

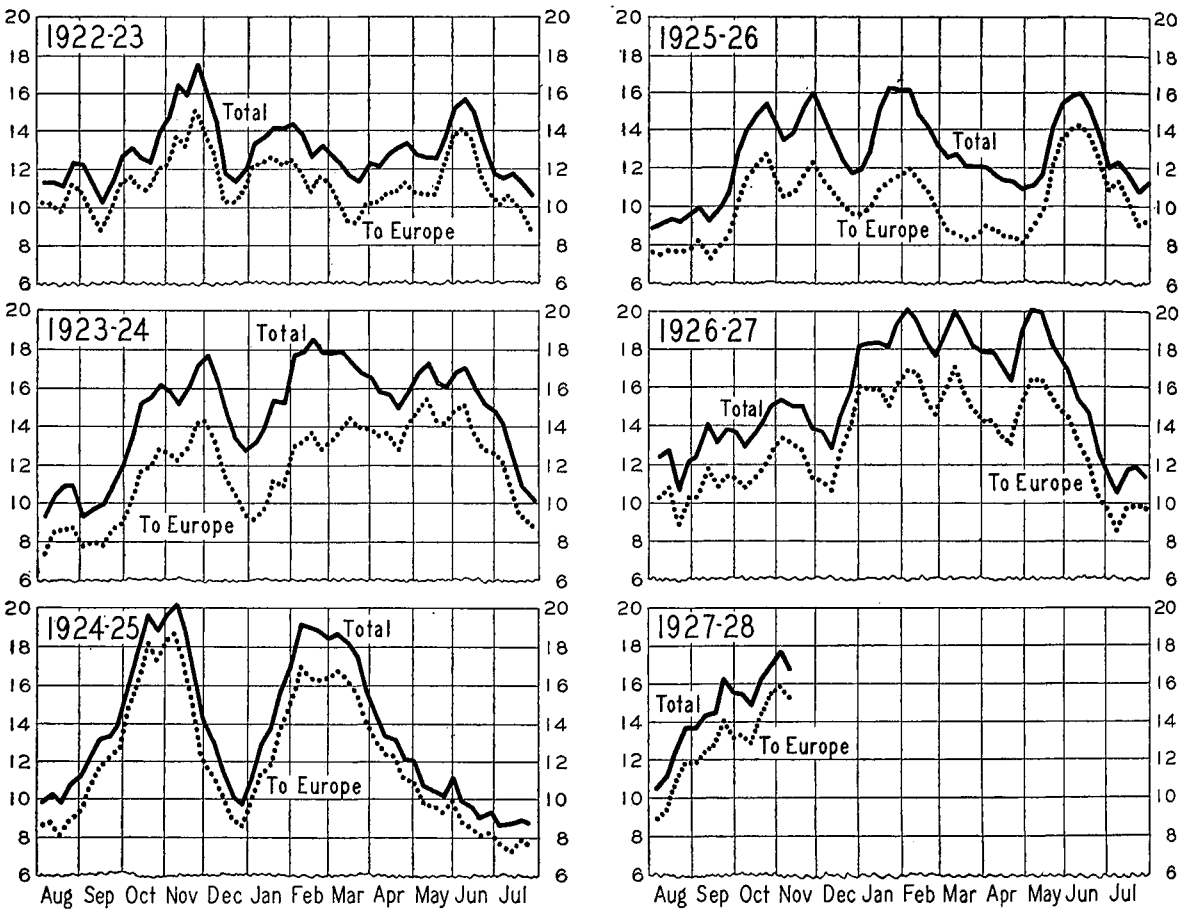
[1] Net exports from Hungary alone in August–October 1927 were 8.8 million bushels; but Broomhall's figures for Russian and Danube shipments combined for the period August–November were only 6.7 million. See Table 6 and Appendix Table VII.

[2] The year 1923–24 was an exception; but September shipments had been very small.

than in any of the past seven years except 1924, when crops were much smaller, and only 7 million bushels below the record figure then established. In general the late and wet harvest and normal growth of trade explain the high figure. Shipments of 31 million bushels to ex-Europe, on the other hand, were relatively small, especially if normal growth is considered. According to Broomhall's data,[1] the smaller takings in 1927 than in 1926 were due chiefly to smaller shipments to China and Japan and to Central America. But Egypt, North and South Africa, Chile, and New Zealand as well have apparently imported slightly less wheat and flour this year than last. Net import data confirm reductions in the imports of Japan, and also of Egypt, where the wheat crop is the largest in post-war years.[2] Brazil has taken considerably more, probably because better wheat was available from Argentina; and Peru, Syria, and India have taken slightly more. The decrease in shipments to China and Japan

CHART 3.—INTERNATIONAL SHIPMENTS OF WHEAT AND FLOUR, WEEKLY FROM AUGUST 1922*

(Million bushels: 3-week moving average)



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

[1] Broomhall reports shipments to ex-European destinations for the first 17 weeks of 1926–27 and 1927–28 as follows, in thousand bushels:

Destination	1926–27	1927–28
Central America[a]	12,424	11,184
China and Japan	11,896	6,600
Brazil	7,408	8,520
Egypt	2,888	2,856
North and South Africa	1,720	1,544
Chile	64	56
India	...	56
Syria	32	152
Peru	...	112
New Zealand	96	...

[a] Includes also Venezuela, West Indies, Dutch East Indies, etc.

[2] See Appendix Tables I and VII; cf. Appendix Table XXI in WHEAT STUDIES, IV, 55.

has probably been due to the larger crops of wheat and rice in the Orient. Tunis, a net exporter in the early months of 1926–27, has been a net importer this year; and exports from Algeria have been smaller this year than last, despite a larger crop. Last year exportation was stimulated by the demands of importers who sought near-at-hand supplies to avoid the payment of high ocean freight rates.

Among the major importers of Europe, most countries have apparently imported more heavily during August–November this year than in 1926. British, Belgian, Scandinavian, and Dutch net imports during August–October showed appreciable increases, and these increases are confirmed by Broomhall's shipments data for August–November. Net imports of Germany were somewhat smaller this year than last, principally because larger stocks of import wheat this year had made heavy importation in August unnecessary; September and October net imports were larger this year than last. On account of liberal marketings by farmers, Italy had imported slightly less wheat this year than last through October, though Broomhall's data show larger shipments for August–November.[1] The situation in France is not accurately revealed by official monthly trade statistics, which show a large increase in net imports this year—20.1 million bushels in August–October 1927 as against 7.4 million for the same period in 1926. Last year net import statistics understated the facts because importers were allowed partial refund of the duty and their imports often were not recorded until the wheat had passed into consumption and the duty was paid; and this year's figures, especially for August, presumably include some wheat which reached France several months before. Broomhall records direct shipments to France of 18.6 million bushels in August–November 1926 as against only 12.0 million for the same period of 1927; and these figures, showing a large decrease in French takings this year, probably represent the facts more closely than do the official data.[2]

[1] For any given period, of course, net imports to a European country could not be expected to coincide precisely with exports or shipments to that country.

[2] Broomhall's data on shipments of wheat and flour, in million bushels, by countries of destination are as follows for August–November in the past two years. These data do not disclose the full quantities of wheat carried to the designated destinations, for each country presumably secures some of the wheat and flour recorded as shipped to orders.

Country	1926	1927	Country	1926	1927
France	18.6	12.0	Italy	18.2	20.3
Belgium ...	17.0	24.6	Greece[a]	5.3	5.0
Holland ...	23.2	30.4	Scandinavia	6.9	7.2
Germany[b] ..	21.3	24.6	Austria[c] ...	5.7	4.8

[a] Includes Turkey.
[b] Includes also Poland and Czecho-Slovakia.
[c] Includes Malta.

Sources of Exports

North America, as usual, furnished the bulk of the world's exports during August–November. According to Broomhall's shipments data shown in Table 6 (p. 118), this year's shipments exceeded those of 1926 by 12 million bushels. Canadian new-crop wheat naturally has moved slightly less freely this year than last on account of the later crop. Net exports of 31.6 million bushels in August and September were 6.8 million bushels larger than last year's because the large carryover of old-crop wheat permitted a relatively heavy movement. Net exports in October, when relatively small quantities of wheat were threshed, were over 11 million bushels smaller this year than last. In November, however, the movement became very rapid; 58 million bushels were exported, as against 50 million last year.

United States net exports of 126 million bushels have been exceeded only in 1924 and 1921, and ran about 21 million bushels higher than in 1926 for the August–November period. The export movement began more slowly this year. July and August net exports totaled only 39 million bushels as against 54 million in the same months of 1926. Last year European countries hastened to obtain winter wheat of excellent quality from the southwestern states, while little old-crop Canadian wheat was available; but this year more old-crop Canadian wheat was available and the southwestern states had smaller crops of poorer quality. In September and October this year net exports from the United States were large—74 million bushels for the two months as against 52 million in 1926. This was principally due to an exceptionally heavy movement from the Pacific Coast following the harvest of a huge crop and heavy marketings of damp wheat. It largely escaped

the attention of eastern traders. During August–November exports of wheat and flour from Pacific Coast customs districts totaled 43 million bushels, a third of the United States total, as against 29 million in 1926. In September and October alone exports from this region reached 28 million bushels this year, some 12 million bushels above those of a year ago.[1] Consequently exports from areas east of the Rockies have not been so noteworthy this year as appears at first glance from the United States totals.

TABLE 6.—INTERNATIONAL SHIPMENTS AND NET EXPORTS OF WHEAT AND FLOUR FROM PRINCIPAL EXPORT AREAS, AUGUST–NOVEMBER, 1921–27*

(Million bushels)

Aug.–Nov.	International shipments (Broomhall)								Net exports from	
	Total	North America	Argentina	Australia	Russia	Danube	India	Other	United States	Canada
1921	217.4	178.4	6.9	29.3	2.3		.2	.3	149.0	71.8
1922	218.8	183.6	24.7	6.9	2.6		1.0	....	106.2	128.8
1923	221.9	151.2	31.8	14.7	8.9	4.2	4.8	6.3	64.3	126.2
1924	255.0	201.4	26.7	12.3	.3	1.1	12.4	.8	149.0	76.0
1925	207.5	145.3	18.7	10.4	11.2[a]	2.4[a]	1.4	17.7	35.2	123.9
1926	232.8	183.3	7.0	5.7	15.6	5.2	2.4	13.6	104.8	109.3
1927	252.0	195.0	21.1	13.6	3.9	2.8	3.5	12.2	126.1	112.9

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

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

Shipments and net exports[2] from the Southern Hemisphere were much larger during August–November this year than last, when Australia's exports out of the small crop of 1925 had been mostly completed by August, and the Argentine exportable surplus of poor-quality wheat was not in demand. The movement from Australia and Argentina this year has apparently been of normal size for the season, size of crops considered. Next year the August–November period may witness a similar or larger movement from Argentina and a smaller movement from Australia, since the Argentine crop is apparently large, the Australian small.

India has exported only a little more wheat this year than last. The reduction in Russian and Danube shipments is more noteworthy. As we have previously had occasion to point out, Broomhall's data understate the export movement from these areas by considerable amounts.[3] Dependable information on Russian exports this year is not available; but since Broomhall's shipments during August–November have totaled only 3.9 million bushels as against 15.6 million last year and 11.2 million in 1925, there can be little doubt that the movement has been the smallest since 1924, perhaps smaller than in 1923. Broomhall reported no export movement until late September this year. Presumably ample stocks of wheat existed in Russia at the opening of the crop year, and the crop of 1927 seems not to have been distinctly small. Yet the peasants have apparently parted with their grain reluctantly, probably because prices of manufactured articles have been disproportionately high.

Of the Danube countries, Jugo-Slavia has apparently had little wheat to export on account of the short crop. For Roumania and Bulgaria data are not available; but both of these countries have probably exported more than Broomhall's figures suggest—perhaps as much as last year, though the facts are not yet known. Hungary, out of a crop slightly larger than last year's and of far better quality, exported 8.8 million bushels in August–October as against

[1] Official data on exports of wheat and flour from Pacific Coast customs districts during August–November for the past four years are as follows, in million bushels:

1924	17.6	1926	28.6
1925	11.6	1927	42.6

[2] For the Southern Hemisphere, Broomhall's shipments data always coincide closely with official net export data. This is not true of North American figures; Broomhall's annual data usually fall somewhat below the official, for the first half of the year far below because large quantities of Canadian wheat officially recorded as exports have passed only as far as United States lake ports.

[3] See above, p. 115, and WHEAT STUDIES, III, 158 f.

10.8 million in 1926. Exports from the Danube countries in the fall of last year were stimulated by the situation in ocean freight rates. This year, with no such stimulus present and considerably smaller crops in Roumania and Jugo-Slavia, exports might well be expected to prove smaller. On the other hand, the better quality of Danube wheat this year may result in increasing exports later in the season. The Hungarian press has already reported increased milling activity and flour exportation.

IV. WHEAT PRICE MOVEMENTS

The Level of Wheat Prices

Cash prices of wheat on the world's leading markets during August–November have on the whole reached the lowest level for a similar period since the war, 1923 excepted. Comparisons of average and fairly representative cash prices for the past five years, including 1923–24, the year of lowest post-war price, are given in Chart 4 (p. 120). Weighted average prices in United States markets in October approached the low level of 1923 rather closely. The series of British parcels prices may be regarded as the most reliable indicator of world price movements, since it includes all the significant types and grades of wheat moving from the major exporting countries in international trade, and is not so much affected as Canadian and American prices by local developments. During August 1924 and part of October 1925, British parcels prices were lower than this year; but these were the only noteworthy occasions when such was the case during August–November in the past four years. No. 3 Northern Manitoba, however, was cheaper not only in these months, but also in August and early September 1926. This year the late harvest in Canada extended a period, beginning perhaps as early as January 1927, when sound Canadian wheat was at a premium in world markets. The new crop contains comparatively little wheat grading No. 3 Northern or better; and it is possible, unless the Argentine crop proves to be of unusually good quality, that even higher premiums for Canadian wheat of the higher grades will prevail in 1927–28 than prevailed in the latter part of 1926–27. It is significant that No. 3 Northern at Winnipeg throughout August–November this year has not sold so far below the prices ruling in the same months of earlier years as has been true of weighted prices in United States markets or of British parcels prices.

Certain further comparisons are of interest. Last year, at the end of October, British parcels prices rose to over $1.80 per bushel, while at the same time in 1927 the price was less than $1.50—a difference of more than 30 cents per bushel. Similar comparisons for No. 3 Northern at Winnipeg and for weighted prices in United States markets show far smaller differences, some 15 cents per bushel in Winnipeg, and about 20 cents in the United States. High ocean freight rates at the end of October last year raised British prices relative to American and Canadian; and the more noteworthy shortage of the higher grades of Canadian wheat this year than last has resulted in a relatively higher current price for Canadian wheat than for American. These relationships, and the fact that (because the United States was on a domestic basis in 1925–26) American prices in October 1925 were not, like Canadian and British, lower than in October 1927, well illustrate the fact that wheat prices in different large markets by no means remain in identical relationships from year to year. The broad movements are similar, but special circumstances operate to create considerable and significant aberrations.

As judged by British parcels and American prices, the August–November level of world wheat prices has been relatively lower than in 1926, though Canadian prices show less marked differences. French, British, Italian, and German prices of domestic wheats[1] have been much lower this year than last. In France, average October prices were 34 cents a bushel lower in 1927 than in 1926; and in Italy the difference was 44 cents. Several factors account for the lower level this year. The international position is somewhat easier,[2] but in some part the lower level of 1927 may reflect the abnor-

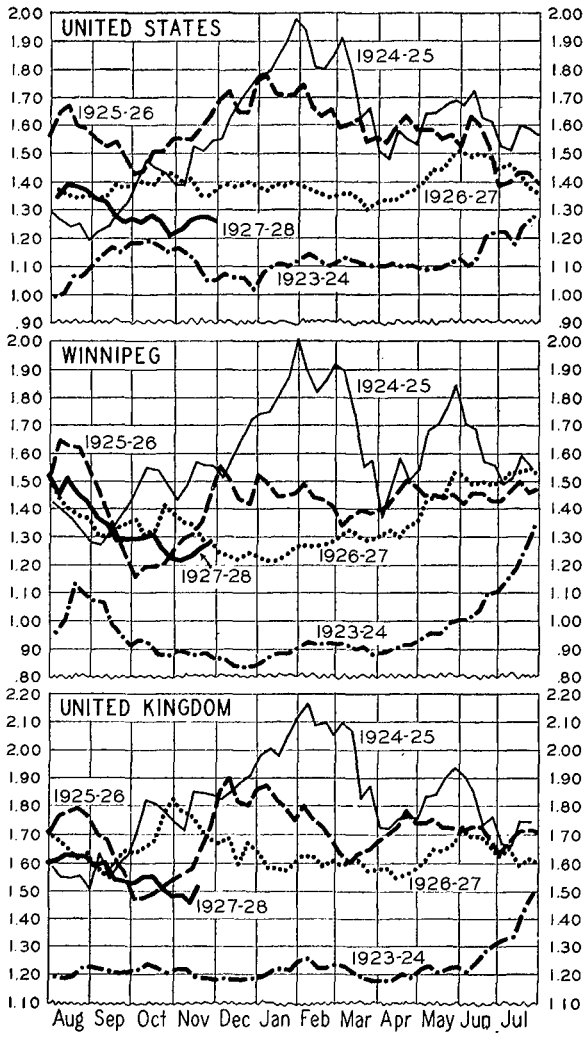
[1] See Appendix Table X.

[2] See below, pp. 122 f.

mal situation in ocean freights last year, and in part (especially in France and Italy) more rapid marketing by farmers this year. Moreover, other things being equal, relatively lower prices this year than last would be expected for British, French, and German wheats, which are of poorer quality this year. In Italy, however, quality is excellent this year, and lower prices cannot be attributed to this factor.

CHART 4.—WEEKLY AVERAGE CASH PRICES OF ALL CLASSES AND GRADES OF WHEAT IN FIVE PRINCIPAL UNITED STATES MARKETS, OF NO. 3 MANITOBA NORTHERN IN WINNIPEG, AND OF SALES OF PARCELS OF ALL CLASSES OF WHEAT IN THE UNITED KINGDOM, FROM AUGUST 1923*

(U.S. dollars per bushel)



* Data from *Crops and Markets, Canadian Grain Statistics,* and *London Grain, Seed and Oil Reporter.* United States prices are weekly weighted averages from six markets since the first week in January 1927.

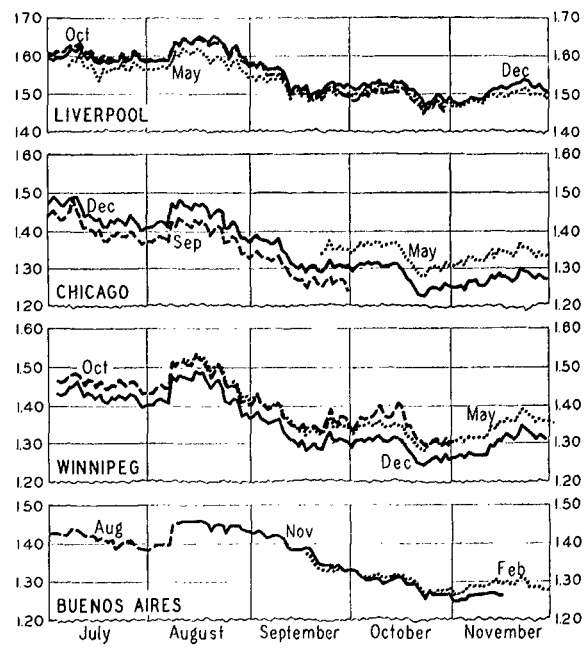
THE GENERAL COURSE OF PRICES

The general course of wheat prices has tended downward during most of the period under review, chiefly under the influence of crop developments in Canada. Comparisons of futures prices in the leading markets of the world are shown in Chart 5, in greater detail than is given by the average weekly cash prices shown in Chart 4. Both futures and cash prices in the several markets show movements more striking for their similarities than for their differences. There was a sharp rise in all markets on August 8; a noteworthy decline, interrupted by periods of comparative stability, from August 8 to October 24 or 25; and a slow recovery during the last week of October and most of November.

The sharp rise in prices on August 8/9, of 7 cents in Winnipeg and 4½ cents in Liver-

CHART 5.—DAILY CLOSING PRICES OF PRINCIPAL WHEAT FUTURES IN FOUR LEADING MARKETS, JULY–NOVEMBER 1927*

(U.S. dollars per bushel)



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

pool, followed the frost in Canada on the night of August 7. For a week or more thereafter the markets were nervous. In response on the one hand to conflicting reports on the extent of frost damage, the progress of rust infestation, and wet harvesting weather in Europe, and on the other hand to profit-taking, prices moved erratically but did not depart far from the high level established on August 8.

The decline began on August 18, on reports of good weather in Canada and private estimates of a large crop despite the frost. Subsequently until mid-September, every day of fair weather in Canada occasioned further recessions, despite frequent reports of unfavorably wet harvesting weather in Europe, which had more effect in Liverpool than in Chicago or Winnipeg. An especially sharp decline occurred on September 10, following the United States official estimate of spring-wheat production. The report, though it showed an increase of only 10 million bushels over the August estimate, was regarded as bearish because traders had been led, by private estimates and reports of rust damage, to expect a decrease. A second notable decline occurred on September 13, following the Canadian official estimate. The decline was checked by unfavorable weather in Canada and Europe and by reports of drought in the Southern Hemisphere. Subsequently until mid-October fluctuations were small; but eventually good harvesting weather in Canada and exceptionally heavy receipts in that country and the United States, together with favorable prospects in the Southern Hemisphere, combined to force a further decline, most marked during the week ending October 22.

On October 24 futures prices reached their lowest level for the August–November period. The ensuing upturn was less spectacular than the preceding decline. Crop developments exerted less influence, though conflicting reports from Argentina on the whole made for firmness, and the official Canadian estimate (issued November 11) was construed as bullish. Throughout August–November speculative interest was small, at least in the United States, as is natural on a falling market.[1] American speculators are said to have transferred their interest largely to corn and to stocks.

The fundamental cause of firmness after October 24 was probably a change in sentiment natural enough in view of the extent of the August–October decline, which amounted to over 25 cents a bushel at Chicago and Winnipeg. With the lower level of prices and reasonable assurance that no further marked changes in crop prospects might be expected, purchasers of cash grain were encouraged to increase their activities. The relaxation of hedging pressure was probably influential also.

The relations of near and distant futures in the different markets showed few peculiarities. With ample wheat available for delivery on contracts, the September future closed at a discount in Chicago, and the October futures in Liverpool and Winnipeg closed quietly. During late September and the first half of October, however, the October future at Winnipeg had commanded a considerable premium over the December. This resulted from unfavorable harvesting weather in Canada, which gave rise to fears that sufficient wheat might not become available in October to permit deliveries on contracts.

United States Cash Prices

Certain features of the movement of United States cash wheat prices during the past five months are of interest. Weekly averages for leading varieties of wheat are shown in Chart 6 (p. 122), with comparisons for preceding years. Winter-wheat prices (No. 2 Hard and No. 2 Red Winter) declined in June and July, with the advent of harvest, somewhat more rapidly than futures prices, and much more than spring wheat prices (No. 1 Dark Northern and No. 2 Amber Durum), which were supported by the possibility of extensive rust damage and the general uncertainty in respect to spring-wheat prospects in North America. Spring-wheat prices, particularly of No. 2 Amber Durum, naturally responded to the

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

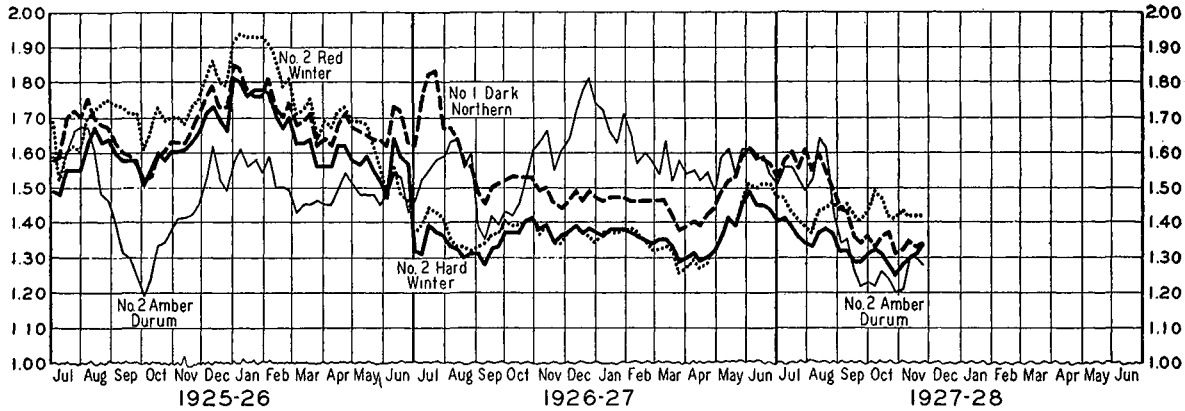
	August	September	October	November
1924.....	50	43	61	61
1925.....	60	59	60	65
1926.....	47	46	44	53
1927.....	42	37	37	35

frost in Canada on August 7 more sharply than did winter-wheat prices. With the advent of harvest in August and September, prices of the spring wheat showed their usual seasonal decline. Restricted buying by mills has this year contributed to the declining prices of both spring and winter

situation last year. Hard spring wheat has not maintained last year's premium over the winter wheats because of the larger crop. Soft winter wheat, short in supply this year, began to command a premium over hard winter as early as June, and there has been a tendency for the premium to

CHART 6.—WEEKLY AVERAGE CASH PRICES OF TYPICAL WHEATS IN UNITED STATES MARKETS, FROM JULY 1925*

(U.S. dollars per bushel)



* No. 2 Red Winter at St. Louis, No. 2 Hard Winter at Kansas City, No. 1 Dark Northern Spring, and No. 2 Amber Durum at Minneapolis. Data from *Crops and Markets*.

wheats. By the end of September the relationship of prices for the several types of wheat was probably established at approximately the position for the year as a whole. The general relationships which prevailed in 1925–26 seem likely to prevail in 1927–28, but sharp differences appear between this year and last.

This year durum wheat, as the result of a huge crop, promises to sell at a discount under hard spring or hard or soft winter, much as has been the case since late September, and sharply in contrast with the

increase. Wheat of high protein content has secured far higher premiums this year than last, when both the winter- and the spring-wheat crops contained an unusual proportion of grain of high protein content. At Kansas City at the end of October 1927, No. 2 Hard Winter with 13 per cent protein content was selling for 8½ cents more per bushel than No. 2 Hard with 12 per cent protein, whereas last year the price differential was only one cent; and at Minneapolis a similar situation prevailed with respect to hard red spring wheat.

V. THE INTERNATIONAL POSITION AND OUTLOOK

Having reviewed the salient features of the first few months of the current crop year, we are now ready to consider the statistical position for the year as a whole. An evaluation of the international position is essential in forming a judgment respecting the outlook for international trade, world prices, and carryovers for ensuing months and the crop year as a whole. Deficiencies in the statistical data on production, consumption, and trade necessarily render evaluation of the statistical position uncertain. It seems clear, however, that the position in 1927–28 may properly be described as fairly easy—not so easy as in 1923–24, but much easier than in 1924–25 or 1925–26. Comparisons with last year are especially difficult because the crop estimates now standing for both years cannot be unreservedly accepted; and in general similarities

between the two years are more noteworthy than differences.

THE INTERNATIONAL STATISTICAL POSITION

A rough indication of the statistical position in the past five years is provided by the following rounded figures, in million bushels, which show the wheat crops of European importing countries (all European countries except Russia, the Danube exporters, and Spain) in comparison with the crops of the major exporting countries (Canada, the United States, Argentina, and Australia). The 1926 figure for the major exporters is partially estimated to allow for an apparent underestimate of North American crops; but the 1926 figure for Europe is not adjusted for a probable underestimate of the French crop. The 1927 figures are the official estimates available to us on December 20.

	1923	1924	1925	1926	1927
European importers ..	830	720	930	760	830
Major exporters	1,640	1,480	1,450	1,670	1,670

At first glance these data suggest a statistical position for 1927–28 quite as easy as that of 1923–24; but in the interval the world's requirements for consumption have increased, probably more rapidly in importing than in exporting countries—and little if any more wheat is this year available in exporting countries to supply larger import requirements than in 1923–24. The data indicate with sufficient clarity that the margin between exportable surpluses and importers' requirements is larger this year than in 1924–25 or 1925–26.

With respect to the relative positions in 1926–27 and 1927–28, the data given above are unsatisfactory. It may perhaps be said that the major exporters, especially in view of larger carryovers, have more wheat available for export this year than last; the situation is uncertain because official estimates of the Canadian crop appear likely to be downward, but perhaps below the truth if so revised, while the Southern Hemisphere crop estimates, if revised at all, may be revised upward. But it seems probable that Russia and the Danube countries will export less wheat this year than last; and on the whole the world's exportable supplies, while somewhat larger than last year, are not notably so. The needs of importing countries also differ little from those of last year. The wheat crops of European importing countries are probably not, as the official data suggest, 70 million bushels larger than in 1926–27, for the French crop was probably underestimated last year, and this year's crops in northwestern Europe appear to exaggerate the available supplies of millable wheat. On the other hand, larger initial carryovers this year than last, and larger crops of rye and potatoes, suggest that European importing countries would take, at equivalent prices, slightly less wheat in 1927–28 than in 1926–27, even with allowance for increase due to growth of population, increasing preference for wheat bread, and further economic recovery. Ex-European countries, notably China and Egypt, probably need somewhat smaller imports this year on account of larger crops.

On the whole it appears to us reasonable to suppose that the margin between exportable surpluses and importers' requirements in 1927–28 is slightly larger than in 1926–27. Moreover, the artificial tightness of the early months of 1926–27, due at first to low stocks in Europe and late crops, and thereafter to the advance in ocean freight rates, has not been present this year, even though the wheat crops were again late. But the contrast between the two years is by no means striking, and unpredictable revisions in crop estimates, increasing knowledge of the utilization of poor-quality wheat as the year progresses, or an exceptionally large or small crop in India may alter the position in either direction.

Practically all observers are agreed that the international position this year differs little from that of 1926–27, though calculations adduced to demonstrate the fact show differences of detail. The margin of exporters' surpluses over importers' purchases implied by Broomhall's latest calculations is of the same size as last year if his reported shipments for 1926–27 are subtracted from his estimate of available surplus for that year. The figure is 92 million bushels for both years. If his November estimates for this year and last are compared, the margin was much the larger last year—152 million bushels as against 92 million.

Last year, however, Broomhall in November greatly underestimated importers' purchases; this year his estimates, perhaps on account of the experience of 1926–27, are more adequate. The *London Grain, Seed and Oil Reporter* estimates the margin between supplies and requirements as 232 million bushels if carryovers into the year are included in available supplies, compared with a margin of 176 in 1926–27; or as 104 million bushels in 1927–28 and 96 million in 1926–27, if carryovers are not included in available supplies.

Probable Net Imports in 1927–28

Students of the wheat situation differ in their methods of estimating the volume of international trade in wheat and flour, but the differences are too detailed for consideration here. In our judgment the most satisfactory measure at present is net exports rather than shipments or net imports, largely because import statistics are notably deficient for ex-European countries and are otherwise misleading, while shipments data understate the facts.

The sum of net imports of importing countries for a given year can never be calculated; but even if it could, it would never equal the sum of the net exports of exporting countries.[1] Nevertheless, the wheat which is exported must pass to some destination, and forecasts of probable net imports are useful for indicating which countries appear to require more wheat, and which less, than in preceding years. Table 7 shows our estimates for the leading European importing countries, in comparison with the reported net imports of 1926–27 and the most recent forecasts of other observers of the situation.

Net imports of Great Britain and the Irish Free State we estimate at 240 million bushels. Last year's heavy imports of 237 million bushels were used in some part to build up stocks depleted in 1925–26, and further increases of stocks seem improbable in 1927–28. But with lower import prices, comparative freedom from economic disturbances, and a domestic wheat crop containing an abnormally large proportion of unmillable grain, a slight increase seems more probable than a decrease.

Table 7.—Net Imports of Principal European Importing Countries in 1926–27, with Forecasts for 1927–28*

(Million bushels)

Country	Net imports 1926–27	Forecasts for 1927–28		
		Broomhall Nov. 29	U.S.D.A. Nov. 21	F.R.I. Dec. 20
British Isles	237.0	240.0	223–251	240
Italy	86.6	94.4	95–105	100
Germany	91.8	91.2	85–100	100
France	62.0	32.0	45–55	45
Belgium	39.5	40.8	40–42	40
Netherlands	28.4	25.6	27–29	29
Scandinavia	19.6	22.4	17–20	20
Switzerland	16.3	16.1	14–17	17
Austria	17.0	16.8	15–16	17
Czecho-Slovakia	20.1	16.8	15–18	19
Total	618.3	596.1	576–653	627

* Net import data are from official sources, in large part through International Institute of Agriculture; Broomhall's forecasts from the *Corn Trade News;* U.S. Department of Agriculture forecasts from *Foreign News on Wheat: World Wheat Crop and Market Prospects,* November 21, 1927. Figures are for crop years August–July, except U.S. Department of Agriculture estimates, which are for July–June. Broomhall's estimates are apparently for *shipments* to the destinations given.

The Italian crop is now estimated 25 million bushels smaller this year than last. The tariff and milling regulations remain unchanged. Imports of about 110 million bushels would be required to maintain apparent domestic utilization (crop plus net imports) at the high levels of the past two years; and per capita wheat consumption is apparently increasing. But last year appreciation of the lira encouraged importation; and in 1925–26 the domestic crop was very large. In view of a large though unmeasured carryover of old wheat into the crop year 1927–28, the probability of stable exchanges throughout 1927–28, and the likelihood that any possible bias in crop estimating would have resulted in figures too high for 1925 and 1926 rather than for 1927,[2] we are disposed to estimate Italian net imports at 100 million bushels. Average annual domestic utilization for the past five years, which may be regarded as a fair indicator of actual average consumption, has

[1] The principal reasons are the varying intervals between entry of export and entry of imports, and errors in statistics.

[2] The reliability of Italian crop estimates cannot be tested; but it is pertinent to observe that the reduction of nearly 20 million bushels in the Italian estimate for 1927 occurred long after harvest, and apparently at a time when native wheat was not receiving full protection from the tariff.

been about 290 million bushels. If one assumes no increase in stocks during the year, allows roughly for apparent growth in consumption, and accepts the official crop estimate, imports of 100 million bushels would provide Italy with a normal supply of wheat.

As most observers have noted,[1] the French situation is difficult to evaluate. Crop estimates range from 284 to 338 million bushels,[2] with the official figure the lowest; and the crop contains an unknown quantity of unmillable grain. Official statistics for August–October 1927 throw little light on probable future net imports or on the French supply situation for 1927–28, since some unknown fraction of the reported August–October imports may have reached France weeks or months before they were recorded in the net import statistics. French millers may require to import considerable quantities of suitable milling wheat, but they perhaps anticipated requirements to a considerable extent in view of the agitation for an increase of the tariff. On September 2 the tariff was raised from 18.2 francs per quintal to 25 francs, and on November 18, to 35 francs, equivalent to about 37 cents per bushel. The high duty will tend to restrict imports; on the other hand, reduction of the percentage of wheat substitutes to be mixed with wheat flour (from 10 to 6 per cent) may act to increase consumption slightly. The carryover of old-crop wheat was apparently large. Furthermore, the late harvest of the 1927 crop necessitated heavier imports in August–October than would otherwise have occurred. If next year's crop is harvested under normal conditions, the present crop year may be effectively shortened. With such allowances for the complex situation as we are able to make, we estimate the net imports of France at 45 million bushels.

German net imports of 92 million bushels in 1926–27 were the largest in post-war years. Wheat consumption is perhaps increasing more rapidly in this country than elsewhere in Europe. The German wheat crop is estimated some 18 million bushels larger this year than last; the rye crop is apparently somewhat larger; the potato crop is much larger. But considerable amounts of wheat and rye were damaged at harvest, and available supplies of breadstuffs are perhaps only slightly larger than in 1926–27. Native rye has been selling only 10–15 cents per bushel below native wheat; this we interpret as indicating that substitution of rye for wheat will not be a material factor in reducing wheat imports. Lower wheat prices than in 1926–27 may further stimulate wheat consumption. The stocks of import wheat, however, were large at the opening of the crop year, and seem unlikely to show an increase at the end of 1926–27. We anticipate that German net imports may reach the record figure of 100 million bushels this year.

The smaller European net importing countries listed in Table 7 have imported much the same quantities of wheat in each of the past five years, and large variations this year are not to be expected. Slightly larger crops both of wheat and wheat substitutes in most countries may be offset by lower import prices of wheat and normal growth of trade. Among the European importing countries not listed in Table 7, there is none which appears likely to import appreciably more wheat this year than last. Poland, with a larger crop of both wheat and rye and a recent prohibition of imports, will presumably take less; Greece also has a larger wheat crop this year than last. For Europe as a whole it now seems probable that net imports of 1927–28 will fall slightly below those of 1926–27, but only slightly. Among the ex-European importers, it seems probable that smaller imports to the Orient and Egypt will more than offset larger imports to Brazil.

We regard our estimates as liberal in the aggregate, but even so, we are disposed to expect that importing countries will take slightly less rather than slightly more in 1927–28 than they took in 1926–27. With the world's available export surpluses apparently slightly larger this year than last, and the requirements of importers slightly smaller, the international position appears slightly easier.

Probable Net Exports in 1927–28

Probable net exports of the major exporting countries may be estimated directly

[1] See especially the U.S. Department of Agriculture's *Foreign News on Wheat*, December 12, 1927, pp. 4 f.

[2] Estimate of the *Moniteur Agricole* of Bordeaux.

from disposition data.[1] Our estimates, in comparison with those of the United States Department of Agriculture, and reported net exports in 1926–27, appear in Table 8.[2]

TABLE 8.—NET EXPORTS OF PRINCIPAL EXPORTING COUNTRIES IN 1926–27, WITH FORECASTS FOR 1927–28*

(Million bushels)

Exporting area	Net exports 1926–27	Forecasts for 1927–28	
		U.S.D.A. Nov. 21	F.R.I. Dec. 20
United States	199	220–245	225
Canada	292	300–330	317
Argentina	143	120–170	151
Australia	103	55–80	74
Russia	49	5–30	20
Danube basin[a]	46[b]	22–41	30
India	14	5–10	8
Others	2[c]	3–16[d]	...
Total	848[b]	730–922	825

* Net export data are from official sources and International Institute of Agriculture; U.S. Department of Agriculture forecasts from *Foreign News on Wheat: World Wheat Crop and Market Prospects*, November 21, 1927. Figures are for crop year August–July, except U.S. Department of Agriculture estimates which are for the year July–June. Totals are for items listed in table, and are not strictly comparable with each other.

[a] Roumania, Bulgaria, Hungary, and Jugo-Slavia. For 1927–28 Jugo-Slavia reported as possibly on an import basis, and not included in the forecasts made by the U.S. Department of Agriculture.

[b] Partially estimated.

[c] Includes Morocco, Tunis, and Chile.

[d] Algeria only.

In the United States, human consumption of wheat may be estimated at 502 million bushels, 10 million bushels higher than last year principally because more wheat will be required per barrel of flour.[3] Seed requirements will probably reach 90 million bushels in view of the large acreage sown to winter wheat in the fall of 1927. Stocks on farms, in country mills and elevators, and visible seem likely to increase, though stocks held by city mills may decrease since the crop is inferior in quality to that of 1926. Total stocks at the end of the year may reach 155 million bushels, as against 138 last year. The sum of the foregoing items of disposition, 747 million bushels, subtracted from the available supplies of 1,010 million bushels, leaves a residue of 263 million bushels for export and feed and waste. The quantity of wheat fed and wasted is likely to be larger this year than last on account of poorer quality, particularly in the Pacific Northwest; but in the absence of direct estimates for past years, the probable disappearance is difficult to calculate. We employ a figure of 38 million bushels, some 20 million higher than the figure for last year, which was low because the crop was apparently underestimated. The use of this figure of 38 million bushels for 1927–28 involves the assumption that the wheat crop will prove to have been underestimated for the third consecutive year, and does not imply that only 38 million bushels of wheat will in fact be fed and wasted.

With supplies available for export and feed and waste of 263 million bushels, we thus anticipate net exports of about 225 million. This figure is calculated on a July–June crop year; but, unless the harvest of the 1928 crop is as early as that of 1926, an August–July figure would not be materially different. We regard our estimates for human consumption, seed requirements, and carryover as more reliable than the estimates for crop, feed and waste, and net exports.

For Canada, the apparent underestimates of crops in recent years and uncertainty respecting the estimate for 1927 render forecasts of probable net exports difficult. The progress of threshing in Canada after the last official crop estimate was issued in October suggests that the final estimate may be reduced; but it is in some degree probable that a reduction will result in a figure below the truth, and we are tentatively disposed to accept the October official estimate. Seed requirements and grain unmerchantable and lost in cleaning are likely to be a little larger this year than last, and consumption requirements and wheat fed on farms no smaller. The carryover appears more likely to decrease slightly than to increase, since so great delay in seeding, which apparently encouraged the Pool to build up stocks toward the end of 1926–27, is unlikely to occur next year. Consequently we estimate probable

[1] See Appendix Table XI.

[2] This year Broomhall has not estimated probable shipments.

[3] For our method of estimating flour and wheat consumption in the United States, see "Statistics of American Wheat Milling and Flour Disposition since 1879," WHEAT STUDIES, December 1927, IV, No. 2.

net exports at about 317 million bushels, the residue when probable consumption and outward carryover are subtracted from the supplies apparently available.

Argentine net exports promise to reach the high figure of 151 million bushels. Seed requirements and flour consumption bid fair to prove slightly larger this year than last. Wheat fed and wasted may be less because there is apparently no such amount of poor-quality wheat as existed in the first half of 1926–27 following the crop of 1925–26. Stocks may show a small increase, but only a small one, because Argentine stocks apparently vary but little from year to year. These items of disposition come to 150 million bushels; with a crop of 240 million bushels and stocks on August 1, 1927, of some 61 million, net exports of 151 million seem probable. But larger net exports are possible if the crop estimate is revised upward, as one may perhaps anticipate in view of reported favorable harvesting weather.

Accepting the latest official estimate of Australian wheat production, and allowing for a small decrease in stocks from the high figure of August 1, 1927, we estimate Australian net exports at 74 million bushels. Our estimate may be exceeded if, as some observers suppose, the crop is larger than the official estimate indicates; but on the whole, in view of deficient rainfall during the growing season, we are disposed to assume that our estimate of net exports is liberal. Domestic utilization of wheat will probably be but slightly if any larger this year than last.

In the aggregate, net exports from the four major exporting countries thus promise to reach about 767 million bushels as compared with 737 million actually reported in 1926–27. This quantity would be the largest ever shipped from these countries regarded as a group. But smaller exports are in prospect from Russia and the Danube countries. The Russian situation is uncertain; but since the 1927 wheat crop is apparently smaller than the crop of 1926, while collections of grain and exports of wheat have been smaller this year than last and credits facilitating exports are reported to have been less easy to obtain, we estimate Russian net exports in 1927–28 at 20 million bushels. On account of smaller crops in Jugo-Slavia and Roumania and the reported unwillingness of producers to sell wheat at the prices which have thus far prevailed, net exports from the Danube countries will apparently not exceed 30 million bushels this year, as compared with 46 million in 1926–27. India will probably export only about 8 million bushels unless the crop to be harvested in March–May proves larger than now appears likely. Other exporters will presumably contribute negligible quantities.

In the aggregate, net exports during August–July 1927–28 thus seem likely to be about 825 million bushels, about 25 million smaller than last year and much the same as in 1923–24. North America bids fair to provide two-thirds of the total, the largest fraction in six years; and Argentina and North America together will probably furnish five-sixths of the total. Our estimate, of course, must be regarded as the middle of a range, and further information on North American crops in particular may necessitate alterations in both the total and the details. With unfavorable new-crop prospects in the spring, larger net exports are probable; with favorable prospects, net exports may be smaller.

The Price Outlook

For the next few months we anticipate no pronounced shift in the level of world wheat prices (as indicated by sales of parcels in the United Kingdom) prevailing throughout November and December. The significant crops have been reported; for several weeks a fairly easy international position has been recognized; and fluctuations, as in December–April 1926–27, bid fair to be of small amplitude. Merchandising rather than a shift in the international position again promises to govern the price movement. Importers are unlikely, for several months at least, to purchase with distinctly more avidity than was shown in November; and exporters are unlikely to press their offers. The principal bullish factors seem likely to be downward revisions in Canadian and European crop estimates, while the only noteworthy bearish influence may be the pressure of Argentine wheat when it moves heavily in February and March. The price of wheat is already

somewhat lower than in the preceding three years, and the international position hardly appears so easy as to induce further declines.

In the United States the revival of milling demand and reduction of visible supplies will be conducive to higher prices. Canadian wheat of the higher grades may command increasingly large premiums, unless the Argentine crop proves of unusual quality. In Canada, moreover, the price movement after a large crop is apparently seasonally upward after the turn of the year. As was the case last year in December–April, when no dominant influence was in evidence, prices in various countries will probably move diversely. But by May or June new-crop prospects, which cannot now be foreseen, will probably begin to exert an influence on prices.

This issue is the work of M. K. Bennett, with the advice of Joseph S. Davis and Alonzo E. Taylor, and the aid of Margaret Milliken, Janet Murray, and Katherine Merriam

APPENDIX

TABLE I.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING AREAS, 1920–27*

(Million bushels)

Year	United States	Canada	India	Australia	Argentina	Chile	Uruguay	Hungary	Bulgaria	Jugo-Slavia	Roumania	Soviet Russia	Mexico
1920	833.0	263.2	377.9	145.9	156.1	23.2	7.8	37.9	30.0	43.0	61.3	.....	15.0
1921	814.9	300.9	250.4	129.1	191.0	23.6	10.0	52.7	29.2	51.8	78.6	.....	5.1
1922	867.6	399.8	367.0	109.5	195.8	25.9	5.2	54.7	32.6	44.5	92.0	.....	13.6
1923	797.4	474.2	372.4	125.0	247.8	28.1	13.3	67.7	29.1	61.1	102.1	.....	13.7
1924	864.4	262.1	360.6	164.6	191.1	24.5	9.9	51.6	24.7	57.8	70.4	.....	10.4
1925	676.4	411.4	331.0	114.5	191.1	26.6	10.0	71.7	49.6	78.6	104.7	713.0	9.4
1926	831.0	409.8	324.7	160.9	220.8	23.3	10.2	74.9	41.1	71.4	110.9	809.6	10.3
1927	871.7	444.3	334.1	115.0	240.0	....	....	75.8	47.4	56.5	96.8	.....	11.5
Average													
1909–13	690.1	197.1	351.8	90.5	147.1	20.1	6.5[a]	71.5	37.8	62.0	158.7[a]	758.9	11.5[a]
1922–26	807.4	391.5	351.1	134.9	209.4	25.7	9.7	64.1	35.4	62.7	96.0	.....	11.5

Year	Morocco	Algeria	Tunis	Egypt	British Isles	France	Germany	Italy	Belgium	Netherlands	Denmark	Norway	Sweden
1920	17.9	16.2	5.2	31.7	56.8	236.9	82.6	141.3	10.3	6.0	7.4	1.00	10.3
1921	23.2	28.5	9.0	37.0	73.8	323.5	107.8	194.1	14.5	8.6	11.1	.97	12.3
1922	12.9	18.9	3.7	36.6	65.2	243.3	71.9	161.6	10.6	6.2	9.2	.64	9.5
1923	20.0	35.8	9.9	40.7	58.4	275.6	106.4	224.8	13.4	6.2	8.9	.59	11.0
1924	28.7	17.2	5.2	34.2	53.9	281.2	89.2	170.1	13.0	4.7	5.9	.49	6.8
1925	23.9	32.7	11.8	36.2	53.7	330.8	118.2	240.8	14.5	5.6	9.7	.49	13.4
1926	16.2	23.6	13.0	37.2	52.2	231.8	95.4	220.6	12.8	5.5	8.8	.59	12.4
1927	24.8	27.6	5.5	44.3	53.1[b]	284.4	113.6	195.8	14.4	5.4	....	.58	11.3
Average													
1909–13	17.0	35.2	6.2	33.7	59.6	325.6	131.3	184.4	15.2	5.0	6.3	.31	8.1
1922–26	20.3	25.6	8.7	37.0	56.7	272.5	96.2	203.6	12.9	5.6	8.5	.56	10.6

Year	Spain	Portugal	Switzerland	Austria	Czecho-Slovakia	Poland	Finland	Latvia	Esthonia, Lithuania	Greece	Japan, Chosen	South Africa	New Zealand
1920	138.6	10.4	3.6	5.4	26.4	22.7	.27	.39	2.58	11.2	41.1	7.6	6.9
1921	145.1	9.3	3.8	6.5	38.7	37.4	.58	.78	3.34	10.3	39.8	8.7	10.6
1922	125.5	10.0	2.5	7.4	33.6	42.4	.71	.96	4.17	9.0	39.2	6.3	8.4
1923	157.1	13.2	3.8	8.9	36.2	49.7	.69	1.64	3.70	8.8	35.2	6.0	4.2
1924	121.8	8.6	3.1	8.5	32.2	32.5	.79	1.58	3.86	8.3	37.3	7.1	5.4
1925	162.6	11.5	3.5	10.7	39.3	57.8	.93	2.16	6.08	14.2	40.0	7.8	4.6
1926	146.6	8.5	4.0	9.4	34.1	47.1	.92	1.86	5.02	11.2	39.9	8.5	7.5
1927	145.6	11.3	4.3	10.4	37.9	54.6	.90	2.18	5.39[c]	13.3	37.8	...	....
Average													
1909–13	130.4	11.8[d]	3.3	12.8	37.9	63.7	.14	1.48	3.63	16.3[d]	32.0	6.0[d]	6.9
1922–26	142.7	10.4	3.4	9.0	35.1	45.9	.81	1.64	4.57	10.3	38.3	7.1	6.0

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

[a] Four-year average.
[b] England and Wales.
[c] Includes estimate for winter wheat only for Esthonia.
[d] One year only.

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

(Million bushels)

Month	United States primary markets				Fort William and Port Arthur				Vancouver			
	1924–25	1925–26	1926–27	1927–28	1924–25	1925–26	1926–27	1927–28	1924–25	1925–26	1926–27	1927–28
Aug.	93.0	43.3	71.6	81.6	1.3	1.2	1.5	2.4	.21	.55	.12	.09
Sept.	82.1	57.9	48.7	79.7	7.1	45.7	32.8	8.6	.41	.28	.29	.32
Oct.	88.0	36.1	37.1	73.2	40.9	53.2	56.1	51.4	3.98	7.04	6.37	6.17
Nov.	60.5	34.1	29.8	44.8	42.7	51.5	60.5	71.0	5.05	9.79	7.22	....
Aug.–Nov.	323.6	171.4	187.2	279.3	92.0	151.6	150.9	133.4	9.65	17.66	14.00	....
Dec.	36.3	34.9	22.4	....	20.3	53.5	26.3	....	4.21	6.14	6.63	....
Jan.	24.7	21.6	24.6	....	4.1	10.5	14.0	....	3.84	10.03	6.83	....
Feb.	19.9	16.2	21.0	....	6.2	4.0	8.6	....	2.08	7.74	4.27	....
Mar.	17.3	15.1	16.6	....	8.5	3.2	6.3	....	.74	6.98	5.94	....
Dec.–Mar.	98.2	87.8	84.6	....	39.1	71.2	55.2	....	10.87	30.89	23.67	....
Apr.	10.4	14.0	14.4	....	8.1	1.8	12.6	....	1.02	3.58	3.58	....
May	17.6	15.7	19.2	....	7.0	17.2	17.3	....	1.54	1.20	1.56	....
June	21.9	21.0	20.7	....	4.1	13.6	7.3	....	.74	.22	.61	....
July	41.8	77.0	58.8	....	6.7	6.4	10.7	....	.11	.27	.14	....
Apr.–July	91.7	127.7	113.1	....	25.9	39.0	47.9	....	3.41	5.27	5.89	....
Aug.–July	513.5	386.9	384.9	....	157.0	261.8	254.0	....	23.93	53.82	43.56	....

* 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.* Vancouver figures include receipts at Prince Rupert after October 1, 1926.

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

(Million bushels)

Month	United States				Fort William and Port Arthur				Vancouver			
	1924	1925	1926	1927	1924	1925	1926	1927	1924	1925	1926	1927
July	1.34	4.95	8.80	7.65	4.32	1.33	1.95	1.33	.42	.05	.05	.06
	6.92	7.59	13.79	8.54	4.55	1.80	2.04	2.07	.62	.05	.10	.07
	8.57	7.75	14.25	10.35	3.03	1.90	1.63	2.89	.30	.06	.06	.04
	10.05	11.67	19.26	11.35	1.73	1.31	1.19	3.10	.13	.03	.01	.02
	17.52	13.77	25.25	26.01	1.41	.97	.92	2.61	.11	.03	.05	.00
Aug.	22.86	11.04	23.63	24.37	.47	.38	.75	.95	.00	.28	.03	.07
	22.32	10.15	18.84	19.56	.29	.23	.22	.81	.00	.23	.02	.00
	21.89	8.98	13.92	16.41	.11	.24	.21	.35	.19	.02	.02	.00
	20.08	8.99	10.89	13.84	.14	.15	.15	.21	.02	.02	.03	.01
Sept.	19.45	11.29	12.92	14.88	.15	.59	1.12	.20	.01	.02	.06	.01
	20.37	13.13	12.47	16.09	.41	6.20	3.02	.23	.01	.01	.10	.03
	18.88	14.15	11.73	19.91	.87	13.27	6.69	1.01	.04	.09	.07	.07
	17.54	14.99	9.77	19.57	3.09	15.83	12.49	3.00	.17	.17	.03	.15
Oct.	17.52	12.37	9.21	20.07	7.92	16.39	13.51	5.19	.48	.29	.07	.07
	20.48	9.42	8.71	21.20	10.64	15.73	12.48	11.79	1.12	1.12	.24	.33
	20.11	7.53	7.30	17.52	8.67	10.72	10.82	11.54	.84	1.86	.75	.36
	19.85	6.19	8.68	14.82	7.64	9.85	13.59	8.71	.91	1.93	1.90	1.61
	19.09	6.72	9.38	14.03	10.07	10.35	14.37	13.30	.79	1.64	2.92	2.75
Nov.	17.05	7.95	8.27	14.02	9.88	8.88	12.46	19.27	.94	2.46	3.33	3.38
	13.61	7.18	7.21	10.24	9.88	10.80	14.16	18.21	1.73	2.53	1.45	2.15
	13.37	8.68	6.59	10.54	9.41	13.67	15.00	14.30	1.50	2.10	.92	2.56
	13.29	8.70	5.86	7.91	10.61	14.42	14.92	15.18	.75	2.69	1.60	2.12

* United States data are unofficial figures compiled from *Price Current-Grain Reporter;* Fort William and Port Arthur data are official figures for *net* receipts furnished by Canadian Board of Grain Commissioners; Vancouver data are official figures compiled from *Canadian Grain Statistics.* United States and Fort William and Port Arthur figures begin with weeks ending July 5, 1924, July 4, 1925, July 3, 1926, and July 2, 1927; Vancouver figures are for weeks ending one day earlier. Beginning October 1, 1926, Vancouver figures include receipts at Prince Rupert.

TABLE IV.—WEEKLY VISIBLE SUPPLIES OF WHEAT IN NORTH AMERICA, UNITED KINGDOM PORTS, AND AFLOAT TO EUROPE, AUGUST–DECEMBER 1927*

(Million bushels)

Date	United States	Canada	U.K. ports	Afloat to Europe	Total	Date	United States	Canada	U.K. ports	Afloat to Europe	Total
Aug. 6	50.5	40.2	....	46.1	136.8	Oct. 8	90.6	37.9	9.4	49.0	186.9
13	59.5	37.0	6.1	44.4	147.0	15	96.1	45.0	8.6	49.7	199.4
20	63.8	32.1	7.2	43.9	147.0	22	95.0	56.8	8.4	49.8	210.0
27	68.2	29.5	7.2	43.1	148.0	29	98.7	70.4	8.6	53.1	230.8
Sept. 3	71.9	25.3	10.4	44.0	151.6	Nov. 5	99.0	89.5	9.0	56.1	253.6
10	75.0	21.9	10.0	43.8	150.7	12	103.7	102.5	10.0	56.5	272.7
17	80.8	21.0	9.7	45.3	156.8	19	99.3	109.7	10.4	57.4	276.8
24	85.8	24.4	10.2	47.3	167.7	26	100.8	115.6	10.1	58.2	284.7
Oct. 1	88.8	32.5	10.0	50.1	181.4	Dec. 3	100.0	124.0	9.6	57.1	290.7

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

TABLE V.—WORLD VISIBLE WHEAT SUPPLIES, DECEMBER 1, 1920–26, AND MONTHLY, AUGUST–DECEMBER 1927*

(Million bushels)

Date	United States	Canada	Argentina	Australia	United Kingdom ports	Afloat to Europe	North America	Argentina, Australia	U.K. and afloat	Grand total	Total ex-Australia
1920 Dec. 1	92.2	51.9	.1	6.5	31.6	36.6	144.1	6.6	68.2	218.9	212.4
1921 Dec. 1	107.9	76.6	3.1	6.7	11.1	42.4	184.5	9.8	53.5	247.8	241.1
1922 Dec. 1	125.4	89.3	2.9	10.0	4.5	56.2	214.7	12.9	60.7	288.3	278.3
1923 Dec. 1	139.2	110.5	2.9	1.0	7.8	51.8	249.7	3.9	59.6	313.2	312.2
1924 Dec. 1	168.7	77.1	4.4	2.0	14.3	59.2	245.8	6.4	73.5	325.7	323.7
1925 Dec. 1	109.6	104.5	3.7	.7	3.8	35.1	214.1	4.4	38.9	257.4	256.7
1926 Dec. 1	133.0	123.0	1.8	2.0	3.6	36.9	256.0	3.8	40.5	300.3	298.3
1927 Aug. 1	65.9	42.7	5.9	12.7	7.8	46.1	108.6	18.6	53.9	181.1	168.3
Sept. 1	108.7	27.4	4.8	9.7	10.4	44.0	136.1	14.5	54.4	205.0	195.3
Oct. 1	143.7	22.2	4.4	6.8	10.0	50.0	165.9	11.2	60.0	237.1	230.3
Nov. 1	156.0	72.0	4.1	3.0	8.6	56.0	228.0	7.1	64.7	299.7	296.7
Dec. 1	154.7	120.9	3.7	.8	9.6	57.1	275.6	4.5	66.7	346.7	346.0
Average, Dec. 1											
1910–14	111.7	35.2	.5	.6[a]	18.6	36.0	146.9	....	54.6	.....	202.0
1922–26	135.2	100.9	3.2	3.1	6.8	47.8	236.1	6.3	54.6	297.0	293.9

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

[a] Australian figure for one year only.

TABLE VI.—CHANGES IN TOTAL FLOUR STOCKS IN THE UNITED STATES (EXPRESSED AS DEVIATIONS FROM A FOUR-YEAR AVERAGE), MONTHLY FROM JULY 1923*

(Thousand barrels)

Crop year	July 1	Aug. 1	Sept. 1	Oct. 1	Nov. 1	Dec. 1	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1
1923–24	—2,855	—3,285	—1,906	— 519	+1,438	+1,853	+ 697	+ 371	+ 175	— 534	—1,373	—2,180
1924–25	—3,056	—3,032	—1,710	+ 49	+2,111	+2,308	+1,953	+3,147	+3,467	+1,465	— 492	—2,224
1925–26	—3,004	—2,834	—2,158	— 438	+1,652	+2,334	+2,392	+2,306	+1,760	+1,193	— 15	—1,576
1926–27	—2,211	—1,518	— 446	+1,096	+2,301	+2,572	+1,892	+1,063	+ 571	+ 139	— 877	—2,103
1927–28	—2,797	—3,856	—3,857	—2,941	—2,022[a]	.....	.....	.....	.....	.....	.....	.....

* The above estimates for changes in total flour stocks are derived by subtracting estimated consumption from domestic disappearance, and expressing the result in terms of deviations from the four-year average, July 1923–June 1927. For detailed explanation of the method of derivation of these estimates, see WHEAT STUDIES, IV, 74–77.

[a] Preliminary.

TABLE VII.—INTERNATIONAL TRADE IN WHEAT AND FLOUR, MONTHLY, JULY–NOVEMBER 1927*

(Million bushels)

A.—NET EXPORTS

Month	United States	Canada	India	Australia	Argentina	Chile	Hungary	Jugo-Slavia	Poland	Algeria	Tunis	Egypt
July	11.6	8.6	5.12[a]	8.1	9.9	....	1.26	.06	(.42)[b]	(.26)[b]	(.10)[b]	(.47)[b]
Aug.	27.5	14.5	1.57[a]	4.1	5.9	....	2.99	.23	(.08)[b]	.51	(.09)[b]	(.51)[b]
Sept.	39.0	17.1	.81[a]	4.2	5.4	....	3.28	....	(.10)[b]	.26	(.18)[b]	(.56)[b]
Oct.	34.7	23.4	.74	2.3	5.3	....	2.57	....	(.45)[b]	(.19)[b]	(.27)[b]	(.60)[b]
Nov.	24.8	57.9	....	...	....	....	....	....	....	....	....	....

B.—NET IMPORTS

Month	Irish Free St.	United Kingdom	France	Germany	Belgium	Italy	Netherlands	Scandinavia	Switzerland	Czecho-Slovakia	Baltic States[c]	Japan
July	1.70	17.33	10.00	10.19	3.62	7.59	2.02	2.06	1.43	1.56	.63	1.16[a]
Aug.	1.10	20.78	7.74	6.48	3.50	3.92	2.10	1.86	1.45	2.26	.57	.27[a]
Sept.	1.82	19.59	7.20	7.22	3.67	2.96	2.80	2.35	1.30	1.62	.70	.34[a]
Oct.	1.70	15.18	5.14	9.23	4.12	3.04	3.38	2.18	1.67	1.82	.78	.24

* Data from official sources and International Institute of Agriculture.
[a] Gross, not net. [b] Net import. [c] Finland, Esthonia, Latvia.

TABLE VIII.—WEEKLY WHEAT AND FLOUR SHIPMENTS BY AREAS OF ORIGIN AND DESTINATION, AUGUST–NOVEMBER 1927*

(Million bushels)

Week ending	North America	Argentina, Uruguay	Australia	Russia	Danube	India	Other countries	Total	To Europe	To ex-Europe
Aug. 6	6.13	1.70	1.02	...	.06	.43	.48	9.82	8.39	1.43
13	7.46	1.85	.92	...	...	.11	.44	10.78	9.14	1.64
20	9.21	.86	1.87	...	.02	.36	.36	12.68	10.70	1.98
27	9.93	1.18	1.50	...	.13	.50	.60	13.84	12.34	1.50
Sept. 3	10.80	1.20	1.09	...	.09	.26	.70	14.14	12.38	1.76
10	10.03	.95	.70	...	.32	.14	.59	12.73	10.98	1.75
17	12.74	.94	.74	...	.76	...	.43	15.61	14.00	1.61
24	11.80	1.12	.85	.05	.10	.42	.56	14.90	13.01	1.89
Oct. 1	14.25	1.57	1.17	.26	.14	...	.66	18.05	15.14	2.91
8	9.57	1.45	.79	.18	.20	.58	.84	13.61	11.19	2.42
15	12.17	.65	.44	.20	.10	...	.96	14.52	13.47	1.05
22	12.41	1.50	.50	.51	.39	.06	.84	16.21	13.68	2.53
29	14.34	1.36	.44	.55	.10	.10	.89	17.78	15.92	1.86
Nov. 5	14.82	.90	.50	.99	.07	.15	.79	18.22	16.79	1.43
12	13.20	1.35	.38	.82	.07	.01	.98	16.81	15.06	1.75
19	13.27	.80	.38	.08	.06	.21	.91	15.71	13.91	1.80
26	12.86	1.76	.30	.22	.15	.14	1.11	16.56	14.78	1.78

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

TABLE IX.—WEEKLY CASH PRICES OF REPRESENTATIVE WHEATS IN LEADING EXPORTING AND IMPORTING MARKETS, AUGUST–NOVEMBER 1927*

(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	Pacific White	No. 2 Winter	Argentine Rosafe	Australian
Aug.	1.37	1.33	1.55	1.52	1.58	1.45	1.46	1.78	n.q.	1.58	1.55	1.64	1.63
	1.43	1.37	1.60	1.64	1.64	1.50	1.47	1.81	1.69	1.59	1.57	1.66	1.63
	1.44	1.38	1.54	1.61	1.63	1.45	1.47	1.83	1.66	1.58	1.56	1.63	1.63
	1.46	1.37	1.49	1.43	1.59	1.42	1.47	1.82	1.63	1.58	1.53	1.59	1.64
Sept.	1.43	1.32	1.44	1.34	1.54	1.37	1.46	1.76	1.58	1.56	1.50	1.55	1.64
	1.45	1.32	1.43	1.35	1.50	1.35	1.44	1.77	n.q.	1.53	1.52	1.54	1.63
	1.42	1.29	1.36	1.26	1.42	1.28	1.42	1.70	1.55	1.49	1.47	1.53	1.60
	1.40	1.29	1.34	1.22	1.43	1.29	1.40	1.70	1.55	1.49	1.48	1.52	1.58
Oct.	1.43	1.31	1.36	1.23	1.41	1.29	1.41	1.64	1.57	1.52	1.48	1.52	1.59
	1.49	1.32	1.33	1.22	1.44	1.30	1.41	1.66	1.57	1.46	1.49	1.52	1.57
	1.47	1.31	1.36	1.26	1.47	1.31	1.40	1.70	1.56	1.50	1.50	1.53	1.58
	1.42	1.28	1.37	1.24	1.45	1.26	1.40	1.69	1.47	1.47	1.47	1.50	1.57
	1.41	1.25	1.31	1.20	1.41	1.22	1.39	1.64	1.46	1.45	1.45	1.49	1.56
Nov.	1.43	1.28	1.32	1.21	1.40	1.21	1.38	1.65	1.47	1.45	1.45	1.49	1.55
	1.42	1.30	1.35	1.30	1.42	1.22	1.41	1.71	1.48	1.45	1.46	1.50	1.55
	1.42	1.31	1.33	1.30	1.49	1.26	....	....	1.51	....	....	1.52	....
	1.42	1.34	1.34	1.28	1.50	1.28	....	....	1.49	....	....	1.50	....

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

TABLE X.—MONTHLY PRICES OF DOMESTIC WHEAT IN EUROPE, FROM AUGUST 1925*

(U.S. dollars per bushel)

Month	Great Britain			France (Chartres)			Italy (Milan)			Germany (Berlin)		
	1925–26	1926–27	1927–28	1925–26	1926–27	1927–28	1925–26	1926–27	1927–28	1925–26	1926–27	1927–28
Aug.	1.53	1.76	1.63	1.62	1.61	1.75	1.88	1.85	1.75[a]	1.55	1.75	1.78[b]
Sept.	1.48	1.46	1.43	1.57	1.77	1.57	1.94	2.03	1.73	1.38	1.71	1.68
Oct.	1.34	1.48	1.37	1.48	1.88	1.54	1.94	2.21	1.77	1.37	1.72	1.62
Nov.	1.45	1.62	1.32	1.37	1.96	....	1.99	2.20	....	1.49	1.78	....
Dec.	1.60	1.55	....	1.33	1.78	....	2.12	2.31	....	1.62	1.74	....
Jan.	1.60	1.55	....	1.39	1.88	....	2.17	2.13	....	1.61	1.72	....
Feb.	1.54	1.54	....	1.42	1.81	....	2.16	2.11	....	1.60	1.72	....
Mar.	1.51	1.52	....	1.39	1.70	....	2.14	2.11	....	1.66	1.73	....
Apr.	1.57	1.50	....	1.40	1.82	....	2.20	2.02	....	1.87	1.76	....
May	1.75	1.58	....	1.39	1.91	....	2.19	2.16	....	1.92[c]	1.92	....
June	1.77	1.65	....	1.52	1.88	....	2.20	1.99	....	n.q.	1.96[d]	....
July	1.84	1.64	....	1.53	1.81	....	1.98	1.80	....	n.q.	n.q.	....

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

[a] Three-week average.
[b] Second half of August.
[c] First half of May.
[d] First half of June.

TABLE XI.—APPROXIMATE DISPOSITION OF WHEAT SUPPLIES IN FOUR LEADING EXPORTING COUNTRIES, 1923–24 TO 1927–28*

(Million bushels)

Item	United States (July–June)					Canada (August–July)				
	1923–24	1924–25	1925–26	1926–27	1927–28	1923–24	1924–25	1925–26	1926–27	1927–28
Initial stocks	153	167	136	111	138	29	41	26	35	48
New crop	797	864	676	831	872	474	262	411	410	444
Total supplies	950	1,031	812	942	1,010	503	303	437	445	492
Net exports	135	258	95	209	225	346	192	324	292	317
Seed requirements	79	84	83	85	90	39	39	40	39	41
Consumed for food	477	479	492	492	502	42	42	42	44	44
Unmerchantable and lost in cleaning	92	74	31	18	38	31	22	18	31	35
Fed on farms						15	5	5	10	10
Apparent error in crop estimate						—11	—23	—27	—19	...
Stocks at end	167	136	111	138	155	41	26	35	48	45
Total disappearance	950	1,031	812	942	1,010	503	303	437	445	492

Item	Argentina (August–July)					Australia (August–July)				
	1923–24	1924–25	1925–26	1926–27	1927–28	1923–24	1924–25	1925–26	1926–27	1927–28
Initial stocks	56	63	57	67	61	42	38	36	30	41
New crop	248	191	191	221	240	125	165	115	161	115
Total supplies	304	254	248	288	301	167	203	151	191	156
Net exports	172	123	94	143	151	86	124	77	103	74
Seed requirements	21	23	25	24	25	10	11	11	12	12
Consumed for food	45	49	54	55	56	28	29	29	30	30
Feed and waste	3	2	8	5	4	5	3	4	5	5
Stocks at end	63	57	67	61	65	38	36	30	41	35
Total disappearance	304	254	248	288	301	167	203	151	191	156

* Based so far as possible upon official estimates for the various items of supply and disposition. Estimates for 1927–28 are preliminary. See text, pp. 125–27. For detailed explanation of our method of estimation and adjustment of items in the disposition table, see notes in WHEAT STUDIES, IV, 61 f.