SURVEY OF THE WHEAT SITUATION

APRIL TO JULY, 1932

New-crop developments were of dominating importance in April–July, against the background of heavy wheat stocks and the economic depression at its worst. Winter wheat in the United States bore out its early promise of a short crop, contrasting sharply with the bumper crop of 1931. In the Danube basin early prospects for a mediocre crop grew worse as the harvest approached. Advices from Russia were inconclusive but not favorable. More than offsetting these influences, however, were favorable developments elsewhere, particularly in European importing countries and the spring-wheat belt of North America. Australia and Argentina increased their acreage, and early developments in these countries seemed auspicious. Crop news generally was less favorable after mid-July.

CONTENTS

Wheat prices responded to these influences by declining afresh—mainly early in June—until in mid-July they reached levels roughly as low as those of September–October 1931. Extremely weak demand from Europe, under the influence of good crop prospects which assured prompt tightening of import restrictions, was a potent factor. Together with lack of pressure from other exporters than Canada, this led to a striking decrease in international shipments from a peak in early May to exceptionally low levels in July. Continued recessions in business activity and in commodity and security prices, and extreme pessimism in June, were auxiliary factors in the wheat price decline. After mid-July, however, a remarkable turn of sentiment found one outlet in buoyant securities markets; and with reports of wheat crop deterioration, world wheat prices moved irregularly upward into August.

Contrary to our previous forecasts, world wheat exports in April–July, and in the crop year as a whole, fell below those of the preceding year. The spring spurt in import purchasing was short-lived. With the outlook for new crops favorable, Europe took less than we had anticipated, drawing upon reserves afloat and in Europe. As expected, shipments to ex-Europe were large, and to the Orient of unprecedented volume.

World visible supplies declined much more than usual in April–July, and on August 1 they were lower than on the same date of the preceding year for the first time since 1926. Holding by farmers in the United States, and perhaps in Argentina, more than offset liberal marketings by Canadian and Australian farmers to take advantage of bonuses on marketed wheat. The short crop of winter wheat in the United States also made for light marketings in June–July. Stocks afloat to Europe were reduced to unusually low levels.

Nevertheless, aggregate wheat carryovers in North America, and year-end stocks in the four major exporting countries as a whole, were somewhat higher than even last year. Reductions elsewhere, particularly in Europe, more than offset this increase. Consequently, year-end stocks in the world ex-Russia appear to have been reduced by 50 to 100 million bushels from the extraordinary peak of 1931. The decline was no greater because of widespread restraints on consumption in importing countries, and the fact that Australian and Canadian crops turned out larger than previously estimated. Russia's carryover was probably moderately low.

Current indications, which are still to be regarded as tentative, point to a 1932 world crop ex-Russia roughly the same in size as that of 1931. With more in importing Europe and less in the Danube basin, and continued restraint upon European imports, the prospect is for further reduction in the volume of international trade in 1932–33.

Slender evidence from Russia seems to suggest no better than a moderate crop in 1932 and reduced Russian exports, though some export sales of new-crop wheat have been reported.

With stocks of old wheat still abnormally heavy, 1932–33 promises to be another year of burdensome surplus. World wheat disappearance (ignoring consumption of native wheat in Russia, China, and Asia Minor) bids fair to be somewhat less than in 1931–32, chiefly because of less feed use in the United States and decreased consumption in the Danube basin. Unless Canadian and Southern Hemisphere crops should suffer radical deterioration or, as now seems improbable, the trend toward tighter restriction of trade and consumption should be reversed, the accumulated wheat surplus seems unlikely to be materially reduced in the new crop year.

Such prospects afford no present ground for predicting sustained advances in wheat prices in September–December. Some pressure may even be experienced when Canadian marketings become heavy if, as seems probable, European import demand should be especially small in the first half of the crop year. Such pressure, however, might be more than offset if substantial deterioration occurs in Argentina and/or Australia as their harvest seasons approach, and if Russia's harvest should turn out very badly. Developments in the general economic situation may tend to counteract or to accentuate price-making influences arising from the wheat situation proper, in ways that seem to us unpredictable.

I. WHEAT CROPS OF 1932

India and Northern Africa

The Indian crop of 1932, the earliest to be harvested in the Northern Hemisphere, is now officially estimated at 337 million bushels, after minor downward revisions of earlier estimates. A poor yield per acre was obtained from a record acreage. The outturn is a little below that of 1931, but is about equal to the average for 1926–30. No export shipments have been reported thus far in the Indian crop year, and none are in prospect unless international wheat prices rise substantially from the prevailing low level.

Standing official estimates of the crops in Algeria, Morocco, and Tunis aggregate 69 million bushels, close to the 1926–30 average and the crop of 1931. Although estimates current in August are often revised sharply, it now seems that Tunis has an exceptionally large crop, Algeria an average one, and Morocco one well below average. This region provided substantial shipments to France in the closing months of the French crop year.

Unofficial reports mention an Egyptian wheat crop about 15 per cent larger than the big crop of 1931, mainly the result of increased acreage. If this increase is realized and if standing estimates for the three French dependencies are not reduced, the 1932 wheat crop in northern Africa will about equal the bumper post-war crop of 1929.

Europe ex-Russia

The winter was mild in most of Europe ex-Russia, and was followed by a late, cold spring. Substantial areas of fall-sown wheat east of Italy–Switzerland–Germany were damaged appreciably, though perhaps less than seemed probable last April. Throughout Europe the wheat crop was backward as it entered the growing season. The condition was generally good except in and around the Danube basin.

Crop developments in the Danube exporting countries, on an area reduced both by sowings and abandonment, appear to have been moderately favorable in May and June. As early as June 30, however, the prospective crop of 1932 in Hungary, Jugo-Slavia, Roumania, and Bulgaria was forecast at only 283 million bushels[1]—a reduction of 85 million bushels from the big crop of 1931. Hot, sultry weather and rust infestation in July reduced prospects further, especially in Jugo-Slavia and Roumania. On July 25 Broomhall appraised

[1] Forecast by the Belgrade office, Foreign Agricultural Service, U.S. Department of Agriculture.

the 1932 crop 100 million bushels below that of 1931; on July 27, 110 million below. Latest official estimates and Broomhall's figures of July 27 are as follows, with comparisons, in million bushels:

Country	Official			Broomhall
	Average 1926–30	1931	1932	1932
Hungary	82	73	58	61
Jugo-Slavia ...	81	99	..	69
Roumania	111	135	73	75
Bulgaria	44	61	54	53
Total	318	368	..	258

Bulgaria alone appears to have harvested a fair crop. There seems no doubt that the crop of the four countries is the smallest since 1924. The quality also is generally poor.

Reports on the progress of crops in other countries of eastern Europe ex-Russia were relatively more favorable. The following tabulation, in million bushels, gives appraisals of the 1932 crops, with comparisons:

Country	Average 1926–30	1931	1932
Greece	11.9	12.2	18.4[a]
Austria	11.6	9.4	11.8[b]
Czecho-Slovakia .	48.7	41.2	46.8[c]
Poland	64.2	83.2	72.0[c]
Baltic States	12.2	14.6	16.0[d]
Total	148.6	160.6	165.0

[a] Official estimate of mid-June, probably too high.
[b] Apparently official; reported in *Corn Trade News*, July 20.
[c] Forecast by Berlin office, Foreign Agricultural Service, as of June 30.
[d] Estimate of the Foreign Service of 9 million bushels for Lithuania; an official estimate (mid-August) of 1.1 million for Finland; our approximations for Latvia and Estonia.

These data point to increased outturns in all areas except Poland; but more recent advices suggest an aggregate crop below rather than above that of 1931.

The aggregate area sown to wheat last fall in the more westerly European countries was generally regarded, as early as April, as exceeding the area sown for the crop of 1931. Apparently increases in France, Germany, Italy, Holland, and the British Isles substantially exceed decreases, mainly in Spain; but the data are still too fragmentary to provide an accurate measure of the change. Winterkilling was slight. The late, cold spring kept growth distinctly backward until roughly the middle of May. On May 11, Broomhall's summary of the situation in European importing countries was: "Crops generally backward, greatly needing fine, warm weather." At the end of June, following six weeks of generally favorable weather, his summary ran: "Chief crops good to very good, others moderate to fair." July, however, was less favorable for crops than June. Especially after the middle of the month and extending into August, there were widespread heavy rains, resulting in a good deal of lodging and in harvest delay. Rust infestation appeared in Italy and southern France, and damage from earlier drought became apparent in Germany.

The following tabulation, in million bushels, summarizes official and unofficial appraisals of prospective western European wheat production in 1932, with comparisons:

Country	Average 1926–30	1929	1931	1932
Portugal	10.4	10.8	12.0	18.2[a]
Spain	143.0	154.2	134.4	161.4[a]
Italy	223.0	260.1	248.0	253.0[a]
France	270.9	337.3	269.6	305.5[b]
Germany	124.0	123.1	155.5	188.7[a]
England, Wales..	47.3	47.5	35.9	41.4[a]
Netherlands	6.1	5.5	6.8	13.8[a]
Belgium	14.5	13.2	13.8	13.9[a]
Switzerland	4.2	4.4	4.4	4.2[a]
Sweden	17.1	19.0	18.0	21.6[b]
Denmark	10.5	11.8	10.1	12.0[c]
Total	871.0	986.9	908.5	1,033.7

[a] Official estimate.
[b] Forecast by the Berlin office, Foreign Agricultural Service, as of June 30.
[c] Our rough approximation.

If these data reflect the facts, the crop is one of record size, even larger than the huge one of 1929, and more than 150 million bushels above the 1926–30 average. The increase over 1929 represents expansion of area largely under the stimulus of high tariffs and import restrictions, not higher yield per acre in 1932. The increase of roughly 125 million bushels over 1931, however, represents increase in yield per acre more than in acreage. The figures given

above are preliminary, and some of them appeared too early to include appraisal of the deterioration that occurred in July. The important French crop, however, may exceed 305 million bushels.[1] A good deal of damp grain has already been harvested, and some rust-shriveled grain in Italy.

Summations of data in the three preceding tabulations (with additional rough allowances for 1932 outturns in Scotland, Ireland, and Norway) yield the following figures for Europe ex-Russia, in million bushels:

Area	Average 1926–30	1929	1931	Preliminary 1932
Danube basin	318	303	368	258
Other Europe	1,024	1,147	1,072	1,202
Total	1,352	1,450	1,440	1,460

Despite a short crop in the Danube basin, Europe ex-Russia has a crop approaching and perhaps exceeding the big one of 1929. The rye crop also promises to be a good one.

RUSSIA

In accordance both with natural and planned tendencies in Russian agriculture, the area sown to winter wheat last fall (according to official statistics which are presumably subject to extensive revision)[2] was about 3 million acres larger than that sown in the preceding fall; the rye acreage was reduced by not quite the same amount. A cold, wet spring, together with some shortage of seed, delayed spring-wheat sowings; there had also been delay in 1930 and 1931.[3] The preliminary official report of spring-wheat acreage, which appeared toward the end of July, indicated a 1932 total of 56.3 million acres. Pertinent statistics are as follows, in million acres:

Crop	1930[a]	1931[a]	1932[b]
Winter wheat	23.4	29.2	32.4
Winter rye.....	68.1	67.5	64.8
Total	91.5	96.7	97.2
Spring wheat.....	57.1	62.9	56.3
Total wheat.....	80.5	92.1	88.7
Total wheat and rye..	148.6	159.6	153.5

[a] *Foreign Crops and Markets*, May 9, 1932, p. 752.
[b] Data on spring wheat and all wheat from *ibid.*, August 1, 1932, p. 149; on winter rye, from *Monthly Crop Report and Agricultural Statistics*, April 1932, p. 234; other figures computed from those cited.

As compared with 1931, reduction is indicated in the total bread-grain area (ignoring the unimportant acreage in spring rye) on account of decline both in winter rye and in spring wheat. As compared with 1930, however, the total bread-grain area is increased, with a large increase in winter wheat more than offsetting a substantial decline in rye and a small one in spring wheat.

Private and official crop advices in June and July gave the general impression that winter-wheat condition was average to good. Rain delayed harvest in late July and August. Spring wheat seems to have progressed less favorably; especially after about mid-June and well into August, dry, hot weather seems to have caused deterioration perhaps most serious in the important regions of Lower and Middle Volga.

The chief of the Central Statistical Office is reported to have given out figures on July 5, based on crop conditions between June 10 and 20, that pointed to 1932 yields of all cereals 15 per cent or more above those of 1931, but 8 per cent below those of 1930. No reliable forecast of the wheat crop, however, can be deduced from such a statement, and no official estimate of the 1931 crop has been published. The unfavorable advices on spring-wheat growing weather appeared after June 10–20. The tenor of crop advices affords sufficient justification for assuming provisionally that the Russian wheat crop of 1932, though possibly larger than that of 1931, is smaller than the big crop of 1930, and this despite an acreage presumably larger in 1932 than in 1930. In view of the undoubted need of

[1] The *Bulletin des Halles* has placed the outturn at 368 million bushels.

[2] The U.S. Department of Agriculture published in *Foreign Crops and Markets*, May 9, 1932, official Russian crop statistics for 1928–30 that represent substantial changes from data previously available. Wheat production estimates for 1928 were increased, and for 1929 and 1930 reduced, the latter by about 95 million bushels or nearly 10 per cent.

[3] For comparisons showing the progress of sowings from week to week in the past three years, see *Foreign Crops and Markets*, July 11, 1932, p. 59.

Russia to sell in order to meet obligations, the firmness and moderate volume of Russian offers of new-crop wheat on the international market as late as mid-August do not point to a big 1932 wheat crop. It is true, however, that low stocks of old-crop wheat within the country would tend to keep early offerings moderate regardless of the size of the new crop, and that announced reduction in planned collections and wider latitude for peasant sales would operate in the same direction.

The United States

The winter-wheat crop in the United States, sown on the smallest area in more than a decade, emerged in poor average condition from a winter notably dry in the Southwest; and abandonment was substantially above average. On the whole, unfavorably dry weather prevailed in April and May, with unusually heavy damage from Hessian fly. Rains in the Southwest in June seem to have more than offset deterioration east of the Mississippi and in the Pacific Northwest. There was not much change in prospects in July, although heavy rains in the Southwest early in July somewhat delayed harvest.

Successive private and official forecasts and estimates of winter and spring crops are shown below, in million bushels:

Date	Winter		Spring		Total	
	Private	Official	Private	Official	Private	Official
April 1, 8....	500	458	...	...	...	...
May 3, 10....	463	441	...	...	...	...
June 1, 9....	433	411	253	...	686	...
July 1, 11....	426	432	274	305	700	737
Aug. 2, 10....	440	442	273	281	713	723

The first three official forecasts of the winter-wheat crop were below trade expectations; the first two included allowances for heavier abandonment than the corresponding private forecasts, and the third allowed for greater decline of condition during May. The July official estimate, however, was above expectations, indicating an estimated harvested area of 33.2 million acres (nearly a million above that given in the June report), and showing no decline in condition during June, whereas the private reports had shown a slight decline. The August estimates agree in showing slight increase in prospective outturn in July.

Thus there has been no great change in the early prospect of a short winter-wheat crop in the United States. Except for the crop of 1925, it is the smallest post-war crop, and with the lowest yield per acre. Both in outturn and yield per acre, it is in striking contrast to the bumper crop of 1931. As shown below in million bushels, preliminary figures by types show that the crops both of hard and soft red winter are notably small, while the crop of Pacific white (including some spring wheat) may

	1925	Average 1926–30	1931	Preliminary 1932
All winter wheat ..	401	590	789	442
Hard red winter...	206	360	494	245
Soft red winter....	170	178	249	147
Pacific white.....	80	85	68	87

be above average. The protein content of hard winter wheat is exceptionally high.

The spring-wheat crop was sown a little late, but under fairly favorable conditions, which improved with adequate rainfall in May. On March 24, an official report stated that farmers had indicated intentions to plant about 20.8 million acres, about 5 per cent more than was sown in 1931. Private estimates issued early in May and again in June and July indicated a somewhat lower acreage. Plentiful rainfall and otherwise favorable growing conditions in June led private statisticians to raise their forecasts, which averaged 253 million on June 1 and 274 million on July 1. The first official forecast, published July 11, was 305 million—a prospective large crop rather than an average one. The official report put the probable area for harvest at 22.2 million acres, some 1.3 million above intentions, more than 2 million above the figures used in private estimates earlier in the month.

Up to about the middle of July, despite threats of heavy damage from grasshoppers, bumper yields of spring wheat were anticipated by many private agencies. But hot, dry weather for about ten days in mid-July, and dry but cooler weather thereafter, gave rise to reports of substantial damage. The August estimates, however, showed less reduction than the trade

had anticipated. Private estimates issued August 2 averaged about the same as on July 1, lower yields being offset by the higher official acreage figures. The second official estimate, issued August 10, put the spring-wheat crop at 281 million bushels, 24 million below the official estimate of July 10, but 8 million above the average of private estimates issued August 2. Such a crop would be about average, in striking contrast to the very short crop of 1931. Reliable indications of quality are not yet available, but early reports are favorable.

A total United States wheat crop of around 723 million bushels, as indicated by the latest official estimates, would be the smallest in 15 years except for that of 1925, and nearly 20 per cent below the crop of 1931. It would not equal the exceptionally heavy domestic disappearance of wheat in the United States in 1931–32, though it would exceed normal disappearance by 50–100 million bushels. But with a carryover of old wheat about half as large as the new crop, shortage of grain for domestic use or for export is out of the question.

Canada

The spring was late in the Canadian Prairie Provinces, and seeding as well; but according to an official report published May 11, "heavy and well-distributed precipitation . . . . resulted in the best germinating conditions since 1928." In the same report, farmers' "intentions to plant" spring wheat in the Prairie Provinces were given as 24.4 million acres, as against 25.3 million in 1931. The forecasts of private statisticians in the United States ran higher, between 24.6 and 26.1 million. The first direct official Canadian estimate, issued August 10, was 26.4 million; this is the largest acreage on record, about a million more than in 1931, and above trade expectations.

May was not particularly favorable or unfavorable. Condition estimates[1] as of May 31 (published June 9) pointed to prospective yields above average in Alberta, and only a little below in Saskatchewan and Manitoba. There was, however, recognition of low moisture reserves in a wide area, and concern about probable damage from cutworms and grasshoppers. June was a favorable month, though less so in the second half than in the first, when rain was abundant; condition improved in Saskatchewan and Alberta. Some trade forecasts of production in June and early July ran as high as 500 million bushels for the Prairie Provinces.

The official telegraphic report of July 12 mentioned satisfactory growing conditions and good progress in the preceding two weeks, but pointed to lack of subsoil moisture over large areas. That of July 19 stated that lack of effective rainfall in areas without adequate reserve moisture (mainly southern and central Saskatchewan, southern Alberta, and the Peace River district) had led to some burning of early wheat. That of July 26 reported hot, dry weather that attacked the crop in these areas at its vulnerable points. Those of August 3, 9, and 16 reported further deterioration from heat and drought.

No official estimate of the Canadian crop is yet available. Three private forecasts of the western Canadian crop published in Chicago August 2 ranged from 435 to 462 million bushels and averaged 449 million. The official report on acreage and condition as of July 31 was interpreted as pointing to an outturn of 431 to 442 million. Further deterioration has occurred in August; on the other hand, final official estimates have usually run higher than early forecasts. It now seems reasonable to assume that the 1932 crop of all Canada may approximate 460 million bushels—a big crop, but much smaller than the bumper crop of 1928.

Other Countries

The Mexican crop of 1932, like the winter-wheat crop of the United States, falls far below that of 1931 and below the 1926–30 average. The Japanese Empire crop is a little larger than those of the past five years. The winter-wheat crop in China is

[1] These estimates of spring-wheat condition are as follows for the Prairie Provinces and all Canada, in percentages of "long-time average yields per acre":

As of	Manitoba	Saskatchewan	Alberta	All Canada
May 31	98	92	102	96
June 30	96	96	105	99
July 31	92	83	97	88

appraised somewhat below the poor one of 1931. Spring wheat in Manchuria was apparently sown on a much reduced acreage and has presumably been damaged by recent severe floods; grain exports have been forbidden. To judge by advices from Palestine and Turkey, the 1932 crop in Asia Minor suffered from persistent drought and is a poor one.

Southern Hemisphere crops are now in the early stages of growth. Advices concerning the minor producing countries are few; in the Union of South Africa, however, the area sown is reported to have been increased substantially.

Official and unofficial reports from Argentina since late May have suggested increase in the sown wheat area of about 10 per cent. Expansion was apparently largely at the expense of linseed, and was facilitated by distinctly favorable sowing weather and abundant cheap labor. Until the latter part of July, wheat condition was favorably commented upon; but then, the winter having been very mild (weather regarded by the *Times of Argentina*[1] as not presaging "really big crops"), the crop advices turned less optimistic, with emphasis on advanced growth. Locusts appeared in northern regions earlier than usual, but are not yet reported to have damaged crops seriously except in restricted areas. As yet there is no indication of heavy abandonment. The principal hazards of the Argentine crop (frost, rust, and drought in the growing season) cannot be appraised in advance. We interpret information available to August 20 to point to a yield per sown acre of about "normal" size, trend considered—between 12 and 12.5 bushels according to our tentative calculations. Assuming a sown area a little more than 10 per cent above the 17.3 million acres reported sown last year, 230 million bushels now appears a reasonable early forecast of this year's outturn; but a crop much larger or smaller is possible. Such a crop would be about the same as that of 1931, but below the 1926–30 average, chiefly because of area reduction.

Early-season crop comments from Australia also suggest a good crop, perhaps of record size. It was early indicated that a substantial increase of acreage was in prospect. Wheat prices in Australian currency were substantially higher this year than last (when the area sown was reduced sharply from that of the year before); and soil and weather conditions were favorable. The American agricultural commissioner in Australia has placed the probable sown area for 1932 at about 18 million acres, close to the record figure of 1930.[2] Presumably a relatively large fraction was sown on fallow land, the area sown being much smaller in 1931 than in 1930; other things equal, this points to relatively high yield per acre. Early in May the soil condition was described as generally good. Subsequent progress with seeding was satisfactory. Rains mostly came as they were needed, though in July and early August there were some complaints of deficient moisture, notably in much of New South Wales and parts of Victoria.

Rainfall in the coming three months will, as usual, mainly determine Australia's yield per acre. The reports to date, including probable wide use of fallowed land for wheat as well as satisfactory reserves of moisture over a wide area, suggest a yield per acre in 1932 above the "normal" yield, which we tentatively appraise close to 12 bushels. If arbitrarily we take 10 per cent above normal yield, or 13.2 bushels, as the outcome now probable, the crop of 1932 on an acreage of 18 million acres would approximate 240 million bushels—the largest to date.

II. INTERNATIONAL TRADE

World wheat shipments of 249 million bushels in April–July brought the crop year's shipments to a total of only 770 million bushels, the smallest in six years with the exception of 1929–30. Net exports of approximately 795 million bushels in 1931–32 were likewise small, and smaller than usual in relation to shipments.

Ex-European countries took more wheat

[1] Issue of June 27, 1932.

[2] *Foreign Crops and Markets*, June 20, 1932, p. 972.

in April–July, and more particularly in August–July 1931–32, than in most other recent years; but European countries imported less. The small European takings are attributable mainly to the large European wheat crop of 1931, governmental restrictions on wheat imports, and crop and price developments in May–July.

North American exporting countries contributed an unusually small proportion of world wheat shipments in 1931–32, as in the preceding year. The Danube countries, Russia, and Australia, on the other hand, shipped notably large quantities. Russian shipments ceased late in April.

The course of international trade differed strikingly from the average seasonal course in April–May, when relaxation of import restrictions in Europe, depletion of European domestic stocks, and a minor scare about the United States winter-wheat crop favored heavy European imports. This year the April–May bulge in shipments was less pronounced than in 1931; and in June–July shipments declined to a much lower level under the influence of favorable crop developments and declining prices.

Volume and Course of Trade

International shipments in April–July, as reported by Broomhall, were 249 million bushels. This is a low figure, as may be seen from Table 1.

Shipments fell below our mid-April forecast for April–July (280 million bushels)[1] primarily because European countries took less wheat than seemed probable, preferring to draw upon stocks afloat and ashore. This development was closely associated with the favorable progress of the wheat crops in the principal European importing countries and in Canada.

Shipments in April–July barely exceeded the shipments of the preceding December–March (246 million bushels). This is in marked contrast with last year, when the excess was 33 million bushels. The reduction in ex-European takings was about 11 million bushels larger between December–March and April–July this year than last; and European stocks and stocks afloat were reduced by a larger amount between April 1 and August 1, 1932, than they were in the same period last year. In both years European import restrictions were tightened promptly with the marketing of the new domestic crops.

Table 1.—International Shipments of Wheat and Flour, from 1926–27*

(*Million bushels*)

Year	April–July (18 weeks)			August–July (52 weeks)		
	Total	To Europe	To ex-Europe	Total	To Europe	To ex-Europe
1926–27.....	283	234	49	818	686	132
1927–28.....	268	218	50	793	662	131
1928–29.....	278[a]	213[a]	65[a]	928[b]	703[b]	225[b]
1929–30.....	205	171	34	613	483	130
1930–31.....	275	210	65	787	608	179
1931–32.....	249	195	54	770	582	188
Average 1926–31.....	262	209	53	788	628	160

* Data from the *Corn Trade News*.

[a] Eighteen weeks from March 30 to August 3.

[b] Fifty-three weeks.

Crop-year comparisons for shipments and net exports are shown below, in million bushels:

Year	Shipments	Net exports	Excess of net exports
1926–27 ...	818	848	30
1927–28 ...	793	825	32
1928–29 ...	916[a]	943	28
1929–30 ...	613	627	14
1930–31 ...	787	829	42
1931–32 ...	770	795[b]	25

[a] Last 52 weeks of the 53 weeks included in this year.

[b] Partly estimated.

Total net exports in 1931–32 exceeded world shipments by a smaller quantity than we thought probable in mid-April, when shipments of 800 million bushels and net exports of 840 million still seemed reasonably in prospect. The usual relationship between North American shipments and official net exports was reversed this year,[2] and, contrary to usual experience, Russian

[1] See Wheat Studies, May 1932, VIII, 397–98. Writing in April, we stated that probable shipments of 280 million bushels suggested net exports of 265 million, judged by relationships prevailing in past years. April–July shipments apparently exceeded net exports by about 25 million bushels this year—a somewhat larger excess than usual.

[2] See below, p. 482.

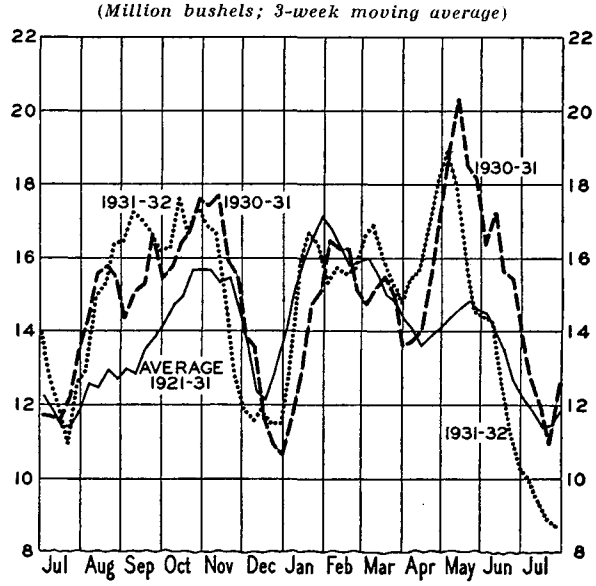
exports seem not to have exceeded Russian shipments.[1]

Both shipment and net export figures indicate that trade was smaller in 1931–32 than in any of the preceding five years except 1929–30, when European importing countries harvested bumper crops and, in addition, had a huge inward carryover of wheat. Since ex-European countries took more wheat in 1931–32 than in four of the five preceding years, the relatively small total shipments of the crop year are attributable to a limited European demand and to a sizable decrease in stocks afloat. Wheat imports into Europe were kept low as a result of the big crop of 1931 in the importing countries (the third largest since the war), governmental restrictions on trade and milling, crop and price developments in the later months which discouraged importers from holding even moderate-sized stocks, and economy in the use of wheat by individuals affected by the depression in trade and industry. These influences were not of equal importance in all countries; and in some they were more than offset by factors operating to increase imports.

The course of international trade in April–July was strikingly different from the average seasonal course. This is shown in Chart 1. From early April to the middle of May wheat shipments were notably heavy; from mid-June to the end of July they were strikingly small. The April–May bulge may be ascribed principally to seasonal relaxation of import and milling restrictions in several important European countries, and unfavorable reports of the American winter-wheat crop. With the North American spring-wheat crop barely sown and three months of uncertain weather ahead of the crops of the principal European importing countries, and with reports of reduced Danubian crops and of seed shortage in Russia, the outlook for future supplies did not appear especially good. But from mid-May to mid-July crop news gradually improved; world wheat prices weakened; and European importers and millers reduced their stocks and resumed the policy of hand-to-mouth buying. In these months uncertainty about future milling and tariff regulations (to which, in the United Kingdom, the coming Imperial Conference at Ottawa[2] contributed) probably played some part in determining the policy of importers, especially as the outlook for the western European crops became more promising.

CHART 1.—WORLD SHIPMENTS OF WHEAT AND FLOUR, 1931–32, WITH COMPARISONS*

(Million bushels; 3-week moving average)



* Broomhall's weekly data from *Corn Trade News* and *Corn Trade Year Books*. The average is for ten years ending July 1931.

CHANGES IN GOVERNMENTAL TRADE AND MILLING REGULATIONS

In wheat-importing countries changes in milling quotas were the most significant development in governmental regulations during April–July. The French government increased the percentage of foreign wheat allowed in the mill mix from 40 per cent at the beginning of the period to a maximum of 50 per cent during May 28–June 16, thereafter gradually reducing the quota to 25 per cent effective July 9 to August 1. Throughout the entire period the proportion of foreign wheat allowed in the French mill mix was higher this year than last; and

[1] This tentative conclusion rests upon a comparison of August–December shipments and net exports. Last April, only August–September comparisons were available.

[2] The Conference convened on July 21 and adjourned August 20. One result was agreement upon the establishment of a 6-cent tariff preference per bushel on Empire wheat in the United Kingdom.

the maximum of 50 per cent reached this season compares with a maximum of 30 per cent in force during June 1931.

In Germany, milling regulations were also relaxed. Yet millers were never allowed to use more than 30 per cent of foreign wheat this year, as compared with 50 per cent last year.

Italian quotas for foreign wheat were successively raised from 80 per cent for durum wheat and 50 to 70 per cent for bread wheat (50 per cent in northern and central Italy and 70 per cent in southern Italy) at the end of March to maxima of from 85 to 95 per cent for durum and from 75 to 100 per cent for bread wheat during late May and most of June. These quotas were drastically reduced as the new crop began to move: on June 27 quotas for bread wheat in Sardinia and Sicily were changed to 5 and 30 per cent, respectively; on July 7 quotas for both bread and durum wheats were lowered to 5 per cent in southern Italy; and on July 15 the quota on bread wheat was reduced to 5 per cent, and that on durum to 30 per cent in northern and central Italy. Last year Italy had no milling regulations during April–June; but a quota law specifying a foreign wheat quota of 5 per cent was established as of July 2.

In other importing countries, with the exception of Sweden, milling quotas remained unchanged during April–July. The Swedish quota was increased from 40 to 50 per cent on June 1, as compared with the lower quota of 15 per cent in force throughout April–July last year. Belgian millers maintained their voluntary agreement to limit the use of foreign wheat to 95 per cent; and Holland continued to permit 77.5 per cent foreign wheat to be ground. These percentages, though high, do not represent any relaxation of restrictions. Last year Belgian millers operated under a similar agreement; but no milling regulations were in force in Holland.

The so-called "British quota law," strikingly different from the Continental quota laws, went into effect in May and quota payments were levied as from June 19. This measure provides a subsidy to wheat growers equaling the difference between the average market price and a standard price of 10 shillings per hundredweight (around $1.30 per bushel at par of exchange), the subsidy being paid from funds derived from a tax (or "quota payment") on all flour milled in, or imported into, the United Kingdom.

Tariff changes[1] were less numerous and important than changes in milling regulations. Germany, though maintaining its basic tariff on bread wheat at $1.62 per bushel, authorized the importation during May–June of a limited quantity at a reduced rate of $1.17, the imports allowed each mill under the reduced rate being equal to 15 per cent of the mill's grindings during April–June 1930. In April, France imposed (in addition to specific duties) a general ad valorem tax of 2 per cent on wheat and 4 per cent on flour imports; but abolished former ad valorem taxes on semolina wheat from Morocco and Algeria of 2 per cent and .55 per cent, respectively. The termination of the France-Canada trade treaty on June 16 made Canadian wheat and flour subject to the general French tariff rates of $1.71 per bushel of wheat and $8.92 per barrel of flour instead of the special rates which previously applied—85 cents and $4.46, respectively. Belgium also imposed an ad valorem turnover tax of 2.3 per cent on imports of bread grains and flour, effective March 27. The Irish Free State established a system of import licenses for wheat flour, and provided that all flour imported without license after July 7 should be subject to a duty of 85 cents per barrel. The Spanish government issued permits for the importation of a total quantity of 11 million bushels of wheat, subject to a duty of about 45 cents per bushel. In Switzerland, import permits were required for wheat and other grains imported after May 12; and in Latvia imports of grains and their products became a government monopoly on June 15.

In ex-European countries, the most important tariff change was made in Japan;

[1] All tariff rates are expressed in terms of par of exchange. This results in overstatement of the effective duties in force in countries with depreciated exchanges; but it provides a good basis for judging the relative amount and direction of change in duties as levied in the original currencies. Moreover, since the par values of the various currencies remain constant, it is easy to convert any given duty from its value at par to its value at any current exchange rate.

this country raised the duty on wheat from 34 to 57 cents per bushel, and that on flour from 22 cents to $1.26 per barrel, effective June 16. Egypt's sliding-scale duties were raised on April 4 from 24–65 cents to $0.38–$1.00 per bushel of wheat, and from $1.80–$3.82 to $2.42–$4.44 per barrel of flour. Near the end of the period (July 22), the wheat duties were raised to $0.46–$1.08, and the duties on flour to $2.77–$4.79.

Several important changes in governmental regulations regarding the sale or exportation of wheat occurred in the Danubian countries during April–July. In Roumania, export premiums on wheat and wheat flour were finally abolished as of April 22. On April 1 internal trade in wheat and rye became free in Jugo-Slavia, though the Privileged Export Company (a government agency) continued to buy wheat for export up to July 1, maintaining a minimum payment (half in bonds, half in cash) of 77 cents per bushel. In Hungary, the grain-ticket system became inoperative July 1, but was later re-established with a lower benefit (19 cents per bushel) to wheat growers, and more aid to other small farmers. The government grain monopoly continued in operation in Bulgaria.

Some commercial agreements between European countries became effective, but these presumably will tend to affect the sources of exports rather than the volume of imports.

Distribution of Imports

Despite considerable seasonal relaxation of European import restrictions, April–July shipments to Europe of 195 million bushels were somewhat small as compared with other recent years (see Table 1, p. 476). Shipments to ex-European countries, on the other hand, were well maintained; at 54 million bushels these were larger than in any of the preceding post-war years except 1929 and 1931.

Although April–July shipments to Europe were 15 million bushels smaller this year than last, actual European takings (shipments adjusted for changes in stocks afloat) were slightly larger in 1932. Comparisons for six years are given in Table 2. Shipments to the Continent in both April–July and August–July 1931–32 were smaller in relation to other recent years than were shipments to the United Kingdom.

Incomplete net import data suggest that the moderately small European takings of April–July 1932 are attributable mainly to small Italian and German imports. This is the third successive year that April–July imports into Germany have been notably small, but the first year that Italian imports have fallen so far below normal. The quota laws and other import restrictions in force in these countries were no doubt largely responsible, coupled with prospects for a big German crop. In France, however, where import restrictions were also severe, April–July imports were moderately large, reflecting depletion of supplies by the end of winter. Belgian imports, approximately equal to those of April–July 1931, were larger than usual. Poland continued, as in the earlier months of 1931–32, to be a net exporter rather than a net importer of wheat.

During the crop year, Italy and Germany imported notably small quantities of wheat and flour—the smallest in at least a decade. Both of these countries were favored with fairly large wheat crops, and both had stringent governmental restrictions on wheat imports. In addition, Italy had a

Table 2.—Shipments of Wheat and Flour to Europe, from 1926–27*

(Million bushels)

Year	Adjusted total[a]	Reported total	Orders	United Kingdom	Continent
	April–July (18 weeks)				
1926–27.....	264	234	61	65	108
1927–28.....	241	218	54	55	109
1928–29[b]....	246	213	46	49	119
1929–30.....	166	171	31	53	86
1930–31.....	220	210	56	53	101
1931–32.....	222	195	51	51	93
	August–July (52 weeks)				
1926–27.....	668	686	151	176	355
1927–28.....	663	662	145	165	352
1928–29[c]....	710	703	145	159	399
1929–30.....	481	483	120	137	225
1930–31.....	609	608	194	131	283
1931–32.....	588	582	193	136	253

* Data from the *Corn Trade News*.

[a] Adding to the reported figures decreases in stocks afloat to Europe, and subtracting increases in these stocks.

[b] Eighteen weeks ending August 3.

[c] Fifty-three weeks.

good-sized carryover of wheat from 1930–31 which was greatly reduced during the course of the past crop year. Imports into the Baltic states, Sweden, Austria, and Holland were also low or moderately low in 1931–32. In most of these countries governmental regulations were partly responsible for the smaller takings, and there was probably some reduction in carryover as compared with last year.

In contrast to the relatively small crop-year imports of the countries just mentioned, the United Kingdom and Denmark imported strikingly large quantities of wheat and flour in 1931–32, and France, Belgium, Switzerland, Czecho-Slovakia, and Greece took moderately large amounts. None of these countries had a large domestic wheat crop, and most of them, with the notable exception of Great Britain, had low or moderately low carryovers upon which to draw. Feed use of wheat was presumably heavy in Denmark and in the United Kingdom; and some wheat may have been substituted for rye in several of the northern European countries.

As shown by Table 3, the large ex-European takings are to be attributed mainly to a continued heavy Oriental demand for import wheat. Shipments to China and Japan totaled 24 million bushels in April–July—an unusually large fraction of the total. The extremely low level of wheat prices influenced these countries to buy heavily, as in preceding months, though purchases slackened in June–July. Japanese importers this year had an added incentive to build up stocks prior to June 16, when increased duties on wheat and flour were scheduled to take effect.

TABLE 3.—SHIPMENTS OF WHEAT AND FLOUR TO EX-EUROPE, FROM 1926–27*

(Million bushels)

Year	Central America[a]	China and Japan	Brazil	Egypt	India	Others[b]
	April–July (18 weeks)					
1927	19.9	9.6	8.8	4.7	3.0	3.3
1928	25.2	10.2	8.7	3.8	...	2.3
1929[c]	24.9	17.2	10.9	5.0	4.7	2.6
1930	13.7	7.1	8.6	2.6	1.0	1.3
1931	18.9	27.2	9.4	3.9	3.7	1.7
1932	16.2	23.9	9.5	2.5	...	1.4
	August–July (52 weeks)					
1926–27	55.6	30.7	22.7	11.0	4.0	7.9
1927–28	55.6	31.4	26.7	9.2	1.5	6.7
1928–29[d]	70.4	69.5	30.3	17.8	27.6	9.4
1929–30	50.1	33.6	28.2	7.6	6.3	4.1
1930–31	58.0	67.4	26.5	11.1	11.0	5.0
1931–32	56.7	88.1	31.2	8.4	...	3.7

* Data from the *Corn Trade News*.

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

[b] North and South Africa, Chile, Syria, Peru, Palestine, New Zealand.

[c] Eighteen weeks ending August 3.

[d] Fifty-three weeks.

Shipments to China and Japan in April–July were not so large as in the same months of 1931. Moreover, they were unusually small in contrast with December–March shipments, on account of smaller Farm Board shipments in April–July, further depreciation of the Japanese and Chinese currencies, and reduced supplies of low-grade wheat available for shipment from Australia. Less than 2 million bushels of the April–July shipments represented exports of stabilization wheat to China on long-term credits.

None of the other ex-European countries or groups of countries imported notably large supplies of wheat during April–July. Shipments to Brazil were of good size, but only fractionally larger than last year in spite of further shipments of stabilization wheat. With fairly large crops and with tariff duties in effect, India apparently imported no wheat, and Egypt took relatively little. The increase in Egyptian tariffs effective April 4 may have tended to depress imports.

The crop year's shipments to ex-European countries were larger than any except those of 1928–29. China and Japan took considerably more wheat even than in 1928–29, and Brazil slightly more; but all other groups took less. The large shipments to China and to Brazil are probably attributable in part to sales of stabilization wheat arranged last fall; but the major factor in the takings of China and Japan was the very low prices of wheats readily available to those countries, especially from Australia.

SOURCES OF EXPORTS

As compared with earlier post-war years (see Table 4), April–July shipments were fairly large only from Australia. North

American shipments were small, as in the two preceding years. Russian and Indian shipments were negligible; from other areas the quantities were moderate.

TABLE 4.—INTERNATIONAL SHIPMENTS OF WHEAT AND FLOUR, BY SOURCES OF EXPORTS, FROM 1926–27*

(Million bushels)

Year	North America	Argentina	Australia	Russia	Balkans	Others[a]
	April–July (18 weeks)					
1926–27.....	142	71	49	8	6	8
1927–28.....	145	74	33	0	7	8
1928–29[b]....	145	89	32	0	9	3
1929–30.....	121	35	22	4[c]	10	13
1930–31.....	119	63	67	10	10	5
1931–32.....	123	52	57	0	10	6
	August–July (52 weeks)					
1926–27.....	484	139	104	44	31	15
1927–28.....	490	178	74	5	29	17
1928–29[d]....	543	224	112	0	37	12
1929–30.....	318	152	65	6[c]	47	24
1930–31.....	354	123	154	99	38	19
1931–32.....	331	138	153	70	60	16

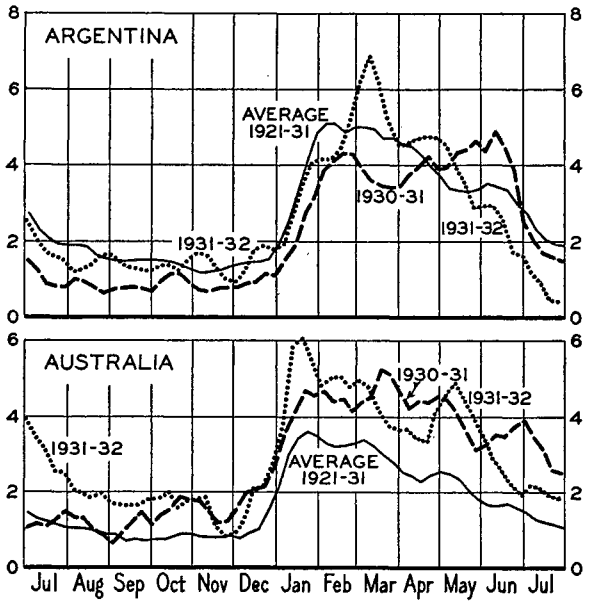
* Data from the *Corn Trade News*.
[a] North Africa, India, Chile, and others.
[b] Eighteen weeks ending August 3.
[c] Shipments from south Russia only.
[d] Fifty-three weeks.

The large Australian shipments, like the still larger ones of April–July 1931, represented continued free exportation from a large wheat crop. In both 1931 and 1932 April–July shipments from Australia approximated one-fourth of all the shipments reported in these months, whereas in previous years the highest percentage contributed by Australia was 17 per cent in 1927. The course of Australian shipments in April–July (Chart 2) was peculiar only in that the bulge in late April and May was more pronounced than usual, and the decline in June more rapid. The May peak doubtless reflected temporary strength in European demand for wheat, and the subsequent rapid decline was probably due both to reduced Australian supplies and to slackened import demand.

Argentine shipments of 52 million bushels in April–July were smaller than in any of the five preceding years except 1930. This resulted primarily from the smaller crop of 1931–32, though relatively firm holding by farmers may have been of some significance. According to the *Times of Argentina*,[1] exporters in that country have complained that growers have been more inclined to hold their wheat since the government declared selling on the basis of "a fijar precio" ("price to be fixed") contracts to be illegal. These factors and seasonal reduction of stocks led to an unusually sharp decline in Argentine shipments in May–July (Chart 2), and also to relative firmness of Rosafé quotations in Liverpool.

CHART 2.—ARGENTINE AND AUSTRALIAN SHIPMENTS, 1931–32, WITH COMPARISONS*

(Million bushels; 3-week moving average)



* Source and note as for Chart 1.

North American shipments in April–July were small. This was partly because, as in 1930, European purchases were smaller than in other recent years, and partly because, as in 1931, other exporting countries provided a larger fraction of total shipments than usual. Throughout a considerable part of the period, futures prices both in the United States and Canada were held relatively too high to permit liberal shipments from the huge exportable supplies. Net export data show up even less favor-

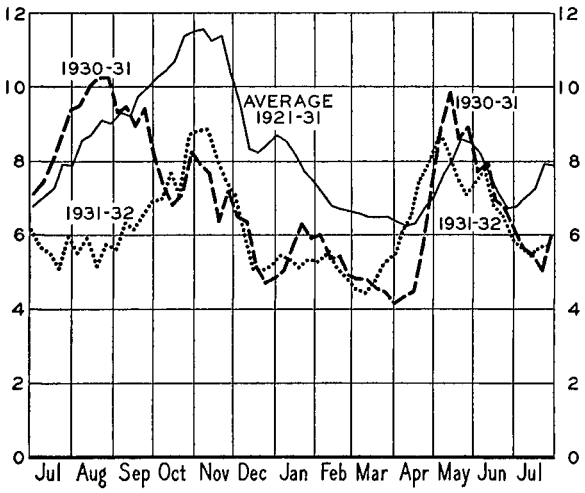
[1] June 20, 1932, p. 27.

ably than shipments data.[1] The combined net exports of Canada and the United States in April–July were reported as only 98 million bushels, the smallest in a decade with the exception of 1925. Canadian net exports had been smaller in only three of the ten preceding years, and United States net exports in only two.

The usual spring peak in North American wheat shipments came earlier than usual this year (Chart 3), reflecting marked

CHART 3.—NORTH AMERICAN SHIPMENTS, 1931–32, WITH COMPARISONS*

(Million bushels; 3-week moving average)



* Source and note as for Chart 1.

improvement in European demand in April and the first week of May. Subsequently these shipments declined more than seasonally (though not more than last year), as Europeans bought sparingly.

During the crop year as a whole, Australia, Russia, and the Danube countries[2] contributed unusually large supplies of wheat to international trade, while Canada, Argentina, and the United States exported fairly small quantities as compared with most other recent years. Indian shipments were negligible, but shipments from northern Africa and other countries were moderately large. Most of these comparisons are apparent from Table 4.

Shipments from North America were 331 million bushels during August–July; this is the smallest figure for any recent year except 1929–30, and it represents the smallest proportion of world shipments that North America has contributed for many years. For the first time in post-war years the sum of the official net exports of the United States and Canada was smaller than Broomhall's shipments from North America—322 as against 331 million bushels. In the past 5 years, the net exports exceeded the shipments by an average of 19 million bushels and a range of from 9 to 26 million. We find no completely satisfactory explanation for this reversal of the usual relationship. Some United States wheat shipped to Canada for storage either late in 1930–31 or in the early months of 1931–32 was apparently sent abroad without being officially recorded as exported during 1931–32 (or, for that matter, without being recorded as an export at any time).[3] This quantity may have been 5–10 million bushels, possibly more. Moreover, United States exports of wheat and flour to Mexico, which presumably are not included in shipments data, were from 1.5 to 2.0 million bushels smaller in 1931–32 than in other recent years. Finally, an unusually large proportion of total United States exports cleared from the more important ports in 1931–32, a development which may have resulted in a larger proportion of the total clearances being reported by Broomhall in 1931–32 than in earlier years.

Reported United States net exports of 115 million bushels in August–July were of approximately the same size as in 1930-31. Even if the net export figure for the past season were raised to 120–125 million bushels to allow for probable understatement, it would still appear strikingly small in view of the large supplies available in 1931–32, the absence of stabilization purchases in the United States, and July–June shipments out of North America of around 79 million bushels of stabilization wheat, in addition to some stabilization flour. Commercial exports of wheat grain in July–June 1931–32 can barely have exceeded 25

[1] A partial explanation appears in the next column.

[2] Net exports of about 83 million bushels from the Danube basin exceeded reported Danubian shipments by an unusually wide margin.

[3] See *World Wheat Prospects*, February 20, 1932, pp. 9–10.

million bushels, by far the smallest quantity in two decades.

Canadian net exports in 1931–32 were smaller than in any of the five preceding years except 1929–30. In three of these years available supplies were considerably larger than in 1931–32; but in 1926–27, when supplies were of about the same size, net exports were almost 100 million bushels larger. The small exports of the past season are accordingly attributable partly to smaller supplies, and partly to the reluctance of owners of Canadian wheat to sell at world parity.

III. VISIBLE SUPPLIES AND OUTWARD CARRYOVERS

World visible supplies of wheat, though still abnormally heavy, declined rapidly during April–July. On August 1 they were over 55 million bushels smaller than last year. Large decreases in visible supplies of United States wheat, and of wheat afloat to Europe, were partially offset by increases in commercial stocks in Canada and Australia.

World wheat stocks were reduced by 50–100 million bushels during 1931–32, in spite of a further increase in the United States carryover and a negligible reduction in the Canadian. Decreases occurred in the European importing countries, the Danube basin, India, and Russia. As of about August 1, Continental European importing countries held notably small wheat stocks, while total North American stocks were of record size. In other major wheat-producing areas supplies of old-crop wheat were of moderate size or lower. In Europe, stocks of rye also were reduced to about a minimum at the close of 1931–32.

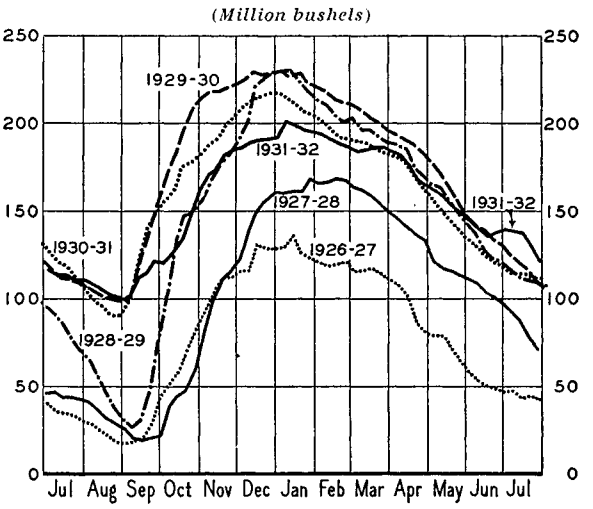
VISIBLE SUPPLIES

The reduction in world visible supplies of wheat during April–July was considerably larger than in the same period of any of the preceding five years. Comparisons, in million bushels, are given below,[1] as of the date nearest the first of each month:

Year	Apr.	May	June	July	Aug.	Decrease Apr.–Aug.
1927.....	310	257	204	160	150	160
1928.....	344	307	263	226	202	142
1929.....	463	407	366	321	325	137
1930.....	469	422	370	339	358	112
1931.....	554	503	477	433	443	111
1932.....	584	525	481	433	386	198

As a result of the rapid decline in commercial stocks in April–July, world visibles were over 55 million bushels lower at the beginning of August 1932 than they were in 1931. This is the first time since 1925–26 that an August–July reduction has occurred. Over half (107 million bushels) of the large net decline in world visibles in April–July represented a reduction in commercial stocks in North America; and over half of the remaining net decrease resulted from a decline of 49 million bushels in Australian visibles.

CHART 4.—CANADIAN WHEAT VISIBLE SUPPLIES, WEEKLY 1931–32, WITH COMPARISONS*



* Includes Canadian wheat in United States lake and Atlantic ports. See Appendix Table V.

In North America, commercial stocks of Canadian wheat declined slowly (see Chart 4) under the influence of large marketings

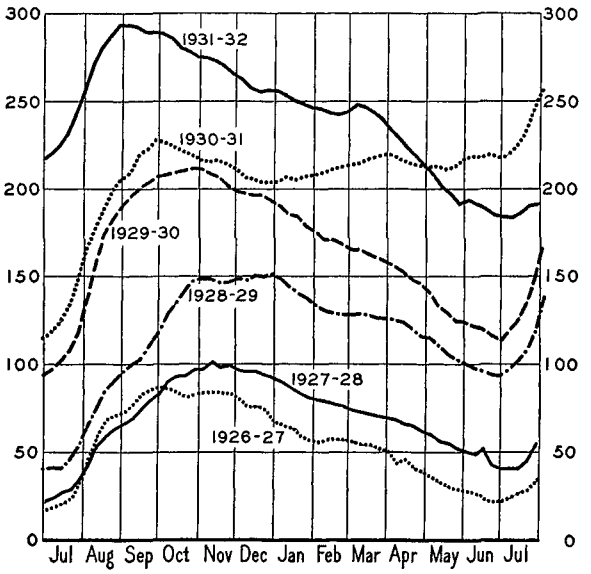
[1] These figures are not identical with those presented in similar tabulations in our previous surveys, since the data here include official estimates of United States and Canadian visibles instead of the estimates published by Broomhall, the *Daily Trade Bulletin*, and the *Daily Market Record*. See Appendix Table V for weekly data in 1932 and for comparisons with earlier years.

and weak export demand. Marketings of Canadian old-crop wheat were especially heavy from mid-May to the end of June, because many farmers who still held wheat wished to secure the 5-cent bonus paid on all wheat marketed before June 30. These marketings were reflected in an unusual bulge in Canadian visibles during late June and early July.

Unlike Canadian visibles, commercial stocks of United States wheat decreased more rapidly during April–July than in the same period of any other post-war year (see Chart 5); this was in marked contrast

CHART 5.—UNITED STATES WHEAT VISIBLE SUPPLIES, WEEKLY 1931–32, WITH COMPARISONS*

(*Million bushels*)



* Includes United States wheat in Canada. See Appendix Table V. Stocks at Toledo, 3.2 million bushels on July 23, 1932, omitted after that date.

with April–July increases in each of the three years preceding. Notably light marketings of United States wheat during these months in 1932 (particularly in July, when the short new winter crop, delayed harvest, and holding by farmers restrained marketings) more than offset the effect of a small export movement; and the requisitions of wheat by the Red Cross for relief purposes[1] probably drew some additional wheat from visible to invisible positions.

[1] Under a joint resolution passed by Congress March 7, covering 40 million bushels of stabilization wheat.

Despite these declines, commercial stocks in North America remained exceptionally large. As of August 1, visible supplies of Canadian wheat in North America stood at a record height of 122 million bushels, while commercial stocks of United States wheat, amounting to 191 million bushels, were 65 million smaller than at the beginning of August 1931, but otherwise the largest on record. Since August 1 commercial stocks of United States wheat have increased less rapidly than usual; farmers have continued, as in July, to hold back new-crop wheat in hopes of getting higher prices.

The decline in Australian visibles during April–July was the third largest in a decade. Stocks were big on April 1 mainly because a large crop had been harvested; and free exportation in the following four months reduced the visible to 26 million bushels at the beginning of August. This figure, though large, had been exceeded in 1921, 1924, and 1930.

Argentine visible supplies declined from 15 million bushels on April 1 (a record for that date) to a moderate level of 6 million on August 1. These supplies, however, always represent only a small proportion of total Argentine stocks.

Stocks in ports of the United Kingdom and afloat to Europe decreased somewhat more than usual during April–July. European importers, facing the improved outlook for the new world crop, declining wheat prices, and uncertainty about import restrictions, withdrew from the import market. At the beginning of August these stocks totaled only 40 million bushels, a strikingly low figure.

YEAR-END STOCKS

Aggregate stocks of wheat in the four major exporting countries as of about August 1, 1932 (July 1 in the United States) moderately exceeded the record total of last year. Comparisons, including our forecast of mid-April, are shown below in million bushels.

The failure of these stocks to decline substantially in 1931–32 was due mainly to smaller European purchases than in any recent year except 1929–30 and to the notably small fraction of total wheat ex-

ports supplied by North America. Our April forecast proved too low largely because stocks afloat and in Europe were reduced more than we thought probable, net mill grindings in the United States were smaller, and the official Australian and Canadian crop estimates standing in April were too low.[1]

Country	1929	1930	1931	Forecast 1932	1932
United States[a]	242	291	319	345	363
U.S. in Canada[a]...	3	5	15	20	16
Canada	104	111	134	75	131
Canadian in U.S...	23	16	6	5	5
Argentina	130	65	80	65	72
Australia	27	40	50	30	30
Total	529	528	604	540	617

[a] As of July 1.

In North America, stocks of United States wheat on July 1 were considerably the largest on record; and stocks of Canadian wheat at the end of July were close to the record high level of last year. The United States carryover was strikingly large because initial supplies were enormous and net exports small. Less flour was retained for domestic use in the United States in 1931–32 than in any other recent year; but this reduction was more than offset by increased use of wheat for feed. The official estimate of wheat fed on farms was 184 million bushels, as compared with 159 million in 1930–31, the highest in earlier post-war years. Calculations of the disposition of wheat in the United States (see Appendix Table XII) suggest either underestimation of the 1931 crop or overestimation of wheat used for feed in 1931–32.

United States stocks of wheat on farms were larger in July 1932 than in any other year of the present century except 1916; city mill stocks were the highest since 1926, when they were first reported; commercial stocks were strikingly large, though not so large as the record supplies of the preceding year; and stocks in country mills and elevators were larger than in any post-war year except 1930.

Large farm stocks in the United States reflected the disposition of many farmers to hold wheat at the low prices prevailing. Yet between March 1 and July 1 farm stocks were reduced by 135 million bushels, an unusually large amount. This, however, was probably mainly due to unusually heavy feeding of wheat on farms, for receipts at primary markets were relatively low in these months (see Appendix Table III). March–June declines in city mill stocks and in country mill and elevator stocks in the United States were notably small, reflecting the willingness of mills to hold good-sized supplies at the low prices, particularly in view of the short crop of winter wheat. Wheat "stored for others" in city mills amounted to less than 7 million bushels on July 1 this year as compared with about 18 million bushels last year, the reduction representing mainly a decrease in stabilization stocks.

A much larger fraction of the United States carryover was owned by private individuals this year than last. During July–June 1931–32 the quantity of wheat and wheat futures owned by the Grain Stabilization Corporation was reduced from around 257 million bushels to some 103 million. The reduction came as the result of sales to foreign governments amounting to 47.5 million bushels, sales of almost 60 million bushels in trade channels, and the government gift to the Red Cross of 40 million. After the second gift to the Red Cross on July 5, the Stabilization Corporation fully controlled less than 58 million bushels, of which roughly one-half was futures. It is not yet possible to say precisely how much of the physical carryover was stabilization wheat.

The large Canadian carryover is to be attributed mainly to small exports. The total supply of Canadian wheat available for 1931–32 was only of moderate size (even after account is taken of understatement of the crop); and domestic utilization was liberal, though domestic flour retention was relatively low. Stocks on farms, though not nearly so large as last year, were not drawn down so far as usual. Aggregate stocks in

[1] The official estimate of the Australian crop has been raised 14 million bushels. Canada's crop is officially admitted to be 18 million bushels above the estimate made last January (see Dominion Bureau of Statistics press release, August 11, 1932).

Canadian terminal elevators and in country and mill elevators in the Western Division were higher even than last year's record total (see Appendix Table IV).

Australian stocks as of August 1, 1932, were of moderate size, some 20 million bushels smaller than last year. This was the result of free exportation from a 1931 crop which was smaller than that of 1930. Argentina held moderate stocks, somewhat smaller on August 1 this year than last. In both years available wheat supplies were of fair size, and wheat was exported in April–July at a moderate rate.

In Russia and the Danube countries wheat stocks were drawn down to low levels during 1931–32, mainly by large exports. The fact that Russia bought several cargoes of wheat for shipment to Vladivostok during the last few months of the season is not necessarily significant in evaluating the Russian stocks position; for it is probably cheaper for Russia to import Australian or Canadian wheat into eastern Siberia than for her to ship Russian wheat there. However, the small Russian shipments of April–July, the reported scarcity of Russian wheat for the spring seeding campaign, and the government's shipment of grain into southeastern Russia for relief purposes, all suggest a depletion of Russian wheat stocks.

With total supplies in India moderately large in 1931–32, and net exports during the season notably small, stocks as of August 1, 1932, should have been at least moderately large in the absence of any marked change in domestic consumption as compared with the average for the five years preceding. Several recent reports from India, however, suggest that the consumption of wheat in that country has increased greatly during the past two years. If so, wheat stocks in India on August 1 were probably of moderate size or somewhat lower.

In European importing countries wheat stocks on August 1 were presumably at the lowest level in at least six years; and stocks afloat to Europe, amounting to 31 million bushels, were the smallest in a decade. Governmental import and milling restrictions in Europe, and the favorable development of wheat crops in European importing countries and in Canada during June–July, were the major influences responsible for the low level of these stocks.

Our preliminary estimates, based mainly on incomplete data of domestic utilization, suggest that the aggregate carryover of wheat in European importing countries was from 20 to 40 million bushels smaller this year than last. Only in the United Kingdom were wheat stocks large at the end of 1931–32. Port stocks in that country amounted to 9 million bushels, and other stocks were perhaps somewhat larger than usual, despite heavy consumption of wheat for food and feed. Switzerland, Greece, and Poland presumably carried over moderately large quantities of wheat on August 1, as compared with earlier years; but the remaining countries held strikingly small supplies. Stocks of imported wheat in leading Continental ports totaled only 3.2 million bushels on August 1, 1932, as against 7.5 million last year.

Fairly large reductions in wheat stocks were witnessed during 1931–32 in Italy, Spain, Austria, Czecho-Slovakia, Poland, and Holland. German stocks appear to have been at a minimum level on August 1 in both 1931 and 1932, though farm stocks in that country were somewhat larger on June 15 this year (5.9 million bushels) than last (4.0 million). French stocks were low at the beginning of 1931–32; and there is little basis for supposing that they were reduced materially.

In ex-European countries, stocks of imported wheat were perhaps fairly large in Brazil, owing to the large imports of Farm Board wheat, and probably of moderate size or larger in Japan and China.

IV. WHEAT PRICE MOVEMENTS

The period under review witnessed a fall of wheat prices in many important markets to levels in mid-July as low as or only a few cents above the record lows reached in September–October 1931. Reports of the new wheat crops in the North American spring-wheat belt and in European importing countries were favorable,

offsetting unfavorable news from the Danube basin, continued poor prospects for United States winter wheat, and absence of export pressure from Russia. Wheat stocks remained extremely high in North America, though reductions in the United States visible were unusually large. Importers purchased slowly,[1] especially after May. The trade cycle continued in its downward phase, though not without exhibiting some evidence of at least a slackened rate of decline after mid-June.

Unfavorable reports of North American and European crops in the latter part of July, however, checked the decline and, with an impetus added especially by a buoyant stock market in the United States and accompanying repair of confidence in the general economic position, gave rise to an advance that persisted well into August. But the net gain from the lows of mid-July to the date of writing, August 20, was not sufficient to bring futures prices back to their position in early April. The wheat price level remains distinctly low.

The Course of Prices

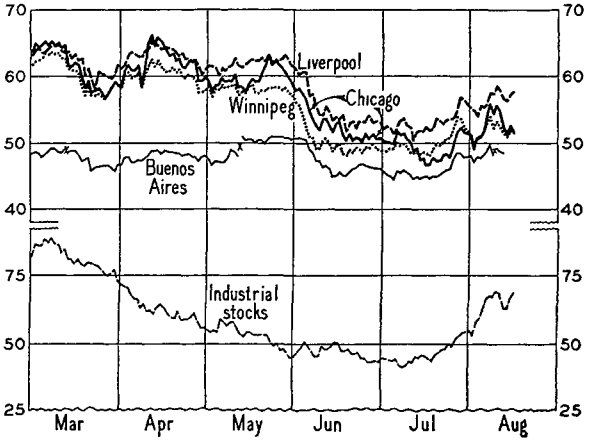
There were five principal phases of the movement of wheat futures prices in April–July, as appears from Chart 6. An advance, beginning in the latter part of March, culminated on April 12–14. Subsequently prices declined to April 28–May 3. The markets were irregularly firm to May 23–28. A decline, sharp in early June, persisted until July 12–18. Finally, a general advance occurred in the latter part of July, slackening after the 28th to be resumed on August 5. This last movement culminated on August 8–10. Thereafter, up to the 20th, Liverpool and Buenos Aires futures changed little, but Chicago and Winnipeg declined irregularly.

The range of futures prices during April–July, measured in cents per bushel by closing prices of the September future in Chicago and the October in Winnipeg and Liverpool, was not large in comparison with the ranges witnessed in earlier years. From the highs in early April to the lows in mid-July, futures fell 19 cents in Chicago, 15 in Liverpool, and 14 in Winnipeg. Wider ranges have been recorded during these months in all of the past seven years except 1931. But when the fluctuations are measured in percentage terms (ratios of lows to highs), the ranges were exceptionally high in Chicago and Liverpool, though not in Winnipeg. The break in prices during early June was not strikingly severe in terms of cents per bushel; but, on account of the relatively low level from which it started, it was a drastic decline in percentage terms.

In mid-July, cash prices of several grades and types of wheat reached points even as low as the previously unprecedented lows of last September–October. On the British import market, British parcels prices at 52 cents were in mid-July at the

Chart 6.—Prices of Wheat Futures in Leading Markets, March–August 1932, with Comparisons*

(Cents per bushel; dollars per share)



* Daily closing prices mainly from *Daily Trade Bulletin*, Chicago; *Grain Trade News*, Winnipeg; and *London Grain, Seed and Oil Reporter*. September future in Chicago; October in Winnipeg and Liverpool; May, June, August, and September successively in Buenos Aires. Dow-Jones index of closing prices of 30 industrial stocks in New York City.

[1] Writing in mid-April (see Wheat Studies, May 1932, VIII, 378, 400), we stated that, apart from the price effects of unpredictable changes in crop prospects and from further unfavorable developments in the general price level and in business conditions, "a tendency to moderate firmness of wheat prices . . . . seems in prospect for the next few months." This view rested largely on the belief that April–July import requirements would prove rather heavy, and would have to be satisfied mainly by purchases from North America, where a prospective disposition to hold rather strongly at the current level of prices seemed in evidence. European import requirements proved substantially smaller than we anticipated; and they were filled from Southern Hemisphere shipments and from afloat stocks to a larger extent than earlier seemed probable.

low point reached toward the end of last September; Nos. 1 and 3 Manitoba and Australian had fallen even below their early October lows; Argentine Rosafé was only 4 cents above. In exporting countries, Argentine wheat at Buenos Aires was a few cents higher than it was early last October; No. 2 Hard Winter at Kansas City and Nos. 1 and 3 Manitoba at Winnipeg also did not touch the earlier lows; but No. 1 Northern Spring at Minneapolis made a new low for the crop year. On the leading futures markets, the closing prices of near futures fell to or below the lows of last September–October only in Chicago; but, except in Buenos Aires, the difference was less than a cent.

The advance of futures prices in early April had its basis mainly in a stream of crop reports from the southwestern United States emphasizing damage from dry weather; among these, the official report issued April 8 was especially influential. During this period Liverpool reported rather active import purchases, and French and Italian import quotas were raised. The dominant influence of crop news from the United States is suggested by the relatively larger advance in Chicago than in other futures markets. Wheat prices in this period rose in the face of steeply declining securities prices in the United States. With the advent of rain in the Southwest, the advance could not be held, and wheat prices drifted downward until early in May. Contributing factors were a less active European demand, early indications of a favorable start for spring wheat in North America, and continued weakness in securities prices. Chicago prices declined more than those in other markets.

During May, although the wheat market received little encouragement from the stock market or from developments in the business situation, wheat prices were maintained on all markets. Liverpool advanced somewhat, and Chicago registered a gain, most of which, however, was lost by the end of the month. The strength in Liverpool seems to have rested mainly on the backwardness of European crops, reports of Russian import purchases, firmness in the c.i.f. offers of the diminishing supplies of Argentine wheat, a fair spot demand on some days, and further unfavorable reports of the United States winter-wheat crop. These reports, aside from the official crop estimate issued May 10, emphasized not only drought in the Southwest, but also Hessian fly infestation in several important areas of the soft red winter-wheat belt; they reached the market mostly on May 16–23. Chicago prices moved upward sharply, practically to the level of Liverpool; but there was little response in other markets. Rains in the Southwest after May 23 caused a downward adjustment of Chicago prices.

The six or seven weeks from early June until mid-July, when wheat prices slid downward, rapidly in the first ten days and more slowly thereafter, undoubtedly were part of a period of extreme gloom. In the United States at least, confidence, already low, was further weakened by fears of domestic relief legislation tending to unbalance the budget, of further disturbing political and financial events in Europe, of prolongation of a sharp flow of gold to export, of continued business recession and growth of business failures. In a degree not measurable, wheat prices doubtless suffered from the generally pessimistic attitude of the business world.

Yet the decline in wheat prices seems attributable mainly to events more closely affecting wheat itself. Crop advices were persistently favorable both from the North American spring-wheat belt (where in the first weeks of June the outlook, necessarily uncertain in May, more and more augured large crops) and from the large importing countries of Continental Europe. On the British market, the crop developments clearly had the effect of enlarging Canadian offers and reducing import demand; reports of Canadian selling pressure were circulated from Liverpool almost daily during the first ten days of June. On several days in late May and early June, Winnipeg was palpably the weakest of the leading futures markets. The evidence warrants the conclusion that Canadian wheats led the market down, an interpretation reasonable in view of the huge wheat stocks remaining in the country and the favorable prospects for the new crop.

In the latter part of June and until mid-

July the decline was much less rapid. Small shipments (especially to orders) and firm offers from Argentina, heavy reductions in stocks afloat, rain that delayed harvest in the American Southwest, threatened damage to North American spring-wheat crops from dry weather in some areas and from grasshoppers and rust, and more pessimistic reports of the Danubian and Italian crops—these firming influences almost offset the apathy of European importers and the growing certainty that new crops in Europe and North America would be good ones in the aggregate. Chicago alone registered a significant decline between June 18 and July 18. Widening of the Chicago–Liverpool spread occurred mainly between July 14 and 18, days when Liverpool dispatches emphasized Russian import purchases and small Argentine shipments, whereas Chicago dispatches emphasized hedging pressure and long liquidation. At about this time, when the Chicago July future closed further below the Winnipeg July than it had done since they were opened in November 1931, assertions were common in the trade press that governmental support was being accorded to the Winnipeg market.

If pessimism in the business world contributed to the wheat price decline that culminated in mid-July, a turn toward optimism contributed to the irregular advance from mid-July into August. In the United States, Congress adjourned on July 16 after enactment of relief legislation less radical than many had feared. Earlier, on July 9, the announcement from Lausanne that a contingent agreement had been reached on German reparations laid the basis for a more hopeful view of the European economic outlook, particularly after it was accepted as indicating a genuine ending of reparations payments. Substantial and sustained advances in the prices of sugar and of livestock, especially hogs, began to attract attention, as did the approach to stability successively registered in weekly statistical measurements of business activity and commodity prices in general. Prices of stocks moved upward without much interruption. Especially toward the end of July and into August an atmosphere recharged with optimism pervaded the daily press. A commentator, writing on August 10 of a 60 per cent advance in the prices of representative stocks from their lows in July, said: "Probably never before in the 140 years' history of the New York stock exchange has such a performance been witnessed."[1]

The movement of wheat prices, however, was about what could reasonably be expected from developments in the wheat situation itself. The international market experienced no heavy pressure of Russian or Danubian new-crop offers, as it had done the year before, nor was there selling pressure from the Southern Hemisphere. More important, and offsetting even the notably weak demand from European importers, was a reversal in the tone of crop reports. Complaints came especially from the North American spring-wheat belt, where dry and hot weather damaged crops that were vulnerable on account of deficient subsoil moisture. Advices of European crop progress were also less favorable than they had been earlier. With profit-taking, temporarily more favorable advices from the spring-wheat belt, and on August 2 private reports of probable spring-wheat production that exceeded expectations, futures prices receded somewhat between July 29 and August 3–4. The advance was resumed for a time thereafter, undoubtedly stimulated up to August 10 by a steep upturn in stocks prices, which itself reflected further improvement in sentiment; there were also some unfavorable crop advices from Canada and rumors of the formation of "commodity pools" in the United States. Chicago was more buoyant than other markets. Thereafter, up to August 20, the drift was downward, more steeply in North America than abroad; on some days Chicago prices were apparently affected adversely by reports that the Ottawa conference would result in preferential treatment of Empire wheat on the British market.

Changes in Price Spreads

April–July changes in the spreads between futures of about the same delivery

[1] B. C. Forbes, in his syndicated column in the *San Francisco Examiner*, August 11, 1932.

month (see Chart 6, p. 487) included, as we have seen, several days in July when Chicago fell to the widest discount under Liverpool that had been recorded in several months; but the discount never reached 10 cents, and never became wide enough to permit commercial export sales even remotely proportional to the available stocks. The Winnipeg – Liverpool spread (October futures), which exceeded 5 cents only in late May and early June, was narrow in contrast with spreads that prevailed in other recent years (1926, 1927, 1928, and 1930), when large Canadian crops were expected, but was wide in contrast with those of 1929 and (in June and July) of 1931, when short crops were expected. In June and July, the Buenos Aires–Liverpool spread tended rather steadily to narrow; it averaged 10.3 cents in mid-May, but only 6.2 cents late in July. This development, unlike what has occurred in the past 6 years except 1928, points both to a rather low level of wheat stocks in Argentina and to relatively firm holding of stocks on Argentine farms.

As would be expected in the presence of heavy stocks of old-crop wheat, with no suggestion of coming shortage, and with no disturbance to market operations comparable with the stabilization operations of 1930–31, distant futures stood above the near at Chicago in April–July. Changes in spreads were unimportant. At Winnipeg the spreads were also consistently positive, as they were in April–July 1931 and 1930 but not in 1926–29, when outward carryovers were much smaller. Here also changes were small. Consistently positive spreads at Liverpool reflected not only sizable stocks of deliverable wheat, but also confidence in the continuance of an easy statistical position. The spreads tended to narrow as deliverable stocks were reduced; and by August 20, the October future had risen, though perhaps only temporarily, to a small premium over the December.

On the British import market, April–July witnessed narrowing of the spreads between the prices of important grades and types of wheat (see Appendix Table X). The average range between the highest-priced wheat (No. 1 Manitoba) and the lowest (Argentine Rosafé) was 15 cents in April; this range was reduced to 11 cents in May, 6 in June, and 4 in July. The July range was the smallest for that month in at least 11 years. No. 3 Manitoba in some weeks of June and July fell below Rosafé for the first time in the crop year. These shifts in spreads reflect on the one hand firmer holding in Argentina of the diminishing supplies, on the other hand freer export offers from heavy Canadian stocks, presumably induced by favorable new-crop prospects.

Reduction of spreads also occurred between important grades of wheat in the United States (see Appendix Table X). The advent of a short crop lent relative strength to the winter wheats, while prospects of an abundant spring-wheat crop tended to weaken spring - wheat prices relatively. Thus the premiums of No. 2 Amber Durum and No. 1 Northern Spring at Minneapolis over No. 2 Hard Winter at Kansas City, which were 20 and 18 cents, respectively, on the average in April, were only 9 and 13 cents, respectively, in July. With prospects unfavorable for both hard red and soft red winter wheat, and liberal carryovers of both, the price spread between No. 2 Hard Winter at Kansas City and No. 2 Red Winter at St. Louis varied but little.

The very wide spreads characteristic of the past two crop years persisted between domestic wheat prices in such important tariff-protected markets as Berlin, Paris, and Milan (see Appendix Table XI) and "world" prices as measured by British parcels prices. As domestic stocks were reduced, prices in these markets advanced between April and May, while parcels prices declined a little; between May and July the outlook for good new crops caused declines in Germany and Italy larger than the decline registered in parcels prices. The movements in all three of these countries, and in Great Britain as well, exhibited the seasonal features to be expected under the circumstances. In Germany the seasonal May–July decline was accentuated by prospects for a record 1932 crop, and perhaps by temporary relaxation of tariff regulations. Later, in August, French prices broke sharply with heavy offerings of new-crop wheat.

V. SOME ASPECTS OF THE OUTLOOK

Present indications point to a world wheat crop of 1932 (outside Russia, China, and Asia Minor) roughly equal to that of 1931. With initial stocks somewhat smaller in 1932–33 than in 1931–32, and prospective Russian exports smaller, total available supplies may fall below those of 1931–32. Disappearance also, however, is likely to prove smaller; hence no great reduction in burdensome world wheat stocks is likely unless Southern Hemisphere crops should progress unfavorably. The distribution of the crop, together with prospective maintenance of import restrictions, suggests a volume of international trade smaller than that of 1931–32 by 75 million bushels more or less, with reduction greater in European than in ex-European takings. If Argentina has an average yield per acre and Australia a yield above average, as is now suggested by early-season reports, export surpluses will be nearly as large as in 1931–32 despite reductions in Russia and Danubia, and the margin between surpluses and requirements will be about as wide.

The current prospect that the international statistical position will remain very easy does not suggest a large and sustained advance in international wheat prices. If a sustained and substantial advance occurs from developments within the wheat situation, it will probably rest upon some combination of circumstances involving unfavorable harvest weather in Canada and Europe, unfavorable crop progress in the Southern Hemisphere, unexpectedly small Russian exports, or very slow marketings of North American wheat. Such developments do not now seem *probable*, though their *possibility* is unquestioned. Price movements may be substantially influenced by developments in the general economic situation, but in what direction we find no basis for appraisal.

Prospective Wheat Disappearance

Standing estimates of 1931 wheat crops, of initial stocks so far as we are now able to estimate them, and of Russian wheat exports point to aggregate 1931–32 wheat supplies of about 4,600 million bushels in the wheat-producing world excluding Russia, China, and Asia Minor. Disappearance was probably around 3,750–3,800 million bushels, and was very large mainly on account of big shipments to China and heavy feed use in the United States and Canada. In this calculation we have taken the initial stocks of 1931–32 as 900 million bushels, the year-end stocks as 800 – 850 million; both figures are subject to revision.

Equally heavy disappearance does not seem to be in prospect for 1932–33. The volume of wheat passing to countries outside of the wheat-producing world excluding Russia, China, and Asia Minor (that is, the takings of some ex-European countries; see below, p. 493) seems likely not to equal the figure for 1931–32. In the United States, reduction in the quantity of wheat fed to livestock bids fair more than to offset any increase that may occur in net mill grindings, for the short winter-wheat crop and the big new corn crop will tend to make wheat feeding less advantageous in some regions. In Canada, increased outturns of barley and oats may be expected to have a similar effect. In the Danube basin, the inward carryover and the 1932 wheat crop together are probably not large enough to maintain disappearance at its 1931 – 32 level; *imports* would be necessary—and a good deal larger than are indicated in view of the prospective big corn crop and the low level of purchasing power—if the level of disappearance there is to be maintained. Significant changes are probably not to be anticipated in Argentina and Australia, and perhaps not in India or European importing countries. In the last, measures tending to restrain wheat consumption have perhaps already registered nearly their full effect; yet the larger rye crop may promote some replacement of wheat by rye. The principal factor[1] tending to increase disappearance in the world outside Russia, China, and Asia Minor is growth of population; the factors making for smaller disappearance now seem likely to offset it, though to what extent is not clear.

It cannot yet be foreseen whether or not

[1] It is still too early to appraise, even as uncertainly as it must be appraised at any time, the outlook for larger or smaller feed use of wheat in European importing countries.

the huge and burdensome world wheat stocks of about 800–850 million bushels as the year opens will be reduced in the course of 1932–33. Not only prospective disappearance is important, but also the volume of Russian exports and the size of the 1932 wheat crop in the wheat-producing world outside Russia, China, and Asia Minor. If this crop equals that of 1931 and Russia exports, say, 40 million bushels (events not yet clearly in prospect, but in accord with such indications as are now available), a moderate increase of world stocks seems more probable than a decrease, on account of prospective reduction in disappearance probably greater than the postulated reduction in Russian exports. A large increase in world stocks, however, is improbable except as the result of very high yield per acre in Argentina and big exports from Russia. A decrease in world stocks of 50 million bushels or more might occur if both Argentina and Australia have poor yields per acre and if Russia exports only about 25 million bushels; but if wheat prices should rise enough to curtail wheat utilization in surplus outlets, reduction of stocks would be correspondingly less.

Import Requirements

The important factors bearing on probable import requirements in 1932–33 are the relative size of initial stocks in importing countries and of stocks afloat to Europe, the size of the 1932 crops of wheat and (less significant) other cereals and potatoes, probable developments in the tightening or relaxation of wheat import restrictions, the level and course of international wheat prices, and, more remotely, the prospects for 1933 crops next spring.

European imports now seem likely to fall below those of 1931–32, which were 582 million bushels in terms of Broomhall's shipments to Europe, and probably a little more in terms of net imports. It may reasonably be supposed that prevailing policies of restricting imports will not soon be weakened, and will be more widely in effect in 1932–33 than in 1931–32. Restrictions on imports will tend to keep European stocks of import wheat at the lowest feasible level, and will cause domestic supplies, always smaller than requirements, to be used to the fullest extent. Barring a large advance in international wheat prices or strikingly unfavorable crop developments next spring, heavy European import purchases for stock-building are not likely.

The 1932 wheat crop in European importing countries is now appraised at about 1,200 million bushels, 125 million more than the crop of 1931. European takings in 1932–33, however, cannot be expected to fall as much as 125 million bushels below those of 1931–32. Current evaluations of the 1932 crop may prove slightly too high. Moreover, drafts upon stocks cannot be as large in 1932–33 as they were in 1931–32, for the level on August 1, 1932, was presumably too low to permit this. Requirements for consumption, if they are to reach the level of 1931–32, probably involve imports not 125 million bushels less than those of 1931–32, but roughly 50–100 million less. Although the larger European crop of rye may make for lower aggregate wheat consumption, growth of population works in the opposite direction. A factor which may tend to enlarge import demand is the possibility that Poland, Roumania, and Jugo-Slavia may become net importers.

Smaller imports in 1932–33 than in 1931–32 seem definitely in prospect in Germany, where the crop may be large enough to permit small net exports, and in France, Spain, and Portugal. The takings of the British Isles, Holland, Belgium, Switzerland, the Scandinavian and Baltic countries, and Greece may also prove somewhat smaller in 1932–33 than in 1931–32, though the indications are not at all clear. Italy alone seems certain to require enlarged imports; her initial stocks are lower and the crop may be smaller. Data now available do not warrant closer appraisal of the probable volume of European takings than the view expressed above — a reduction of roughly 50–75 million bushels from the takings of 1931–32. A combination of circumstances, including final European crop estimates a good deal lower than those now current and prospects for a short world wheat crop next spring, would swell European import purchases in 1932–33, perhaps even bringing them above those of 1931–32.

An important feature of prospective Eu-

ropean import demand is its further concentration into roughly the second half of the crop year. Many countries will tend to import what they need mainly in the second half, when domestic supplies are running low, rather than in the first. The outlook for prospective exports from Russia and the Danube basin much smaller in 1932–33 than last year implies not only that export shipments in August–December 1932 must come in larger proportion from North America than they did in 1931, but also that exports will be relatively low in the first half of the year, high in the second.

Among the ex-European importing countries, larger prospective wheat crops in 1932 than in 1931 suggest reduced imports in Egypt, the Union of South Africa, and Japan. Tightened import restrictions in these countries, and also in Cuba, will tend to operate in the same direction. Brazilian imports may fall off merely because they were high in 1931–32, swelled by stabilization wheat from the United States. Aside from China, these are the major ex-European wheat importers, and smaller ex-European takings in 1932–33 than last year are reasonably to be expected unless China's takings are increased. China is reported to have a shorter wheat crop, and this will tend to increase net imports; but much will depend upon the level of international wheat prices and the course of silver prices. On the basis of slender evidence, we are disposed to assume that China's takings may approach if not equal the large ones of 1931–32; but total ex-European takings may not equal those of 1931–32 unless India should begin to import substantial quantities and/or the short crop in Asia Minor should somewhat swell the takings of ex-Europe.

At the moment, then, the probable volume of international trade in 1932–33 seems likely to be rather small, perhaps (to employ figures about in the middle of a wide range) 75 million below the volume of 1931–32. Roughly, this implies shipments of 675–725 million bushels, and net exports of 685–750 million.[1] The smallest volume of trade in the past 10 years, net exports of 628 million, was recorded in 1929–30; the largest, 943 million, in 1928–29; the average was 786 million.

Export Surpluses

Total available wheat supplies for 1932–33 (initial stocks plus prospective new crops, but excluding United States grain in Canada and Canadian in the United States) in the four major exporting countries now seem moderately likely to approximate 2,250 million bushels,[2] about 35 million more than the available supplies of 1931–32. In 1931–32, domestic utilization of wheat for seed, food, and feed and waste was roughly 990 million bushels, leaving around 1,225 million for export and year-end stocks. Year-end stocks of "normal" size would be roughly 250–300 million bushels, so that some 925–975 million bushels were statistically available for export. With the eventual appearance of net exports of around 155 million bushels mainly from Russia and the Danube countries, there was never a question of immediate shortage, or even of temporary tightness except in so far as holders in North America might prove unwilling to accept the prevailing low prices for quantities required by importing countries from North America.

So far as we are able to appraise the available data, domestic utilization in the four major exporting countries will not be so large in 1932–33 as in 1931–32, mainly because less wheat will probably be fed to animals in the United States. The supplies available for export, after allowance for "normal" year-end stocks, accordingly show prospects of approximating 1,000 million bushels, more or less, mainly depending on the outcome of Southern Hemisphere crops and the utilization of wheat for feed in North America.

Although exportable surpluses in the four major exporting countries may be larger in 1932–33 than in 1931–32, it is clear that surpluses in minor exporting countries as a group are much the smaller. At the moment there is no reason to anticipate significant change in the combined exports of India, northern Africa, Chile, and Poland from the small ones of 1931–32. The Danube countries, however, have appar-

[1] On August 17, Broomhall placed probable shipments in 1932–33 at 705 million bushels.

[2] Using initial stocks of 363, 131, 72, and 30 million bushels, respectively, for the United States, Canada, Argentina, and Australia; and prospective 1932 crops of 723, 460, 230, and 240 million.

ently harvested such small 1932 wheat crops, and have reduced carryovers to so low a level, that only very small net exports (and these principally from Hungary) can be made in the coming crop year; perhaps the reduction from the large exports of 83 million bushels in 1931–32 may reach 55–70 million bushels. No shipments from the Danube were reported by Broomhall in the three weeks ending August 13, a period when the movement should be substantial if supplies were available.

The current trade interpretation of crop advices, chartering, and actual export offers from Russia in recent weeks has been that exports in 1932–33 as large as those of 1931–32 (shipments of 70 million bushels) are not in prospect. Yet one may well recall that as late as September 3, 1930, after several weeks of selling pressure from Russia, Broomhall estimated probable export shipments in 1930–31 as 48 million bushels; actually, reported shipments in 1930–31 were 99 million, and net exports 113 million. In two years, however, the basis for appraisal has somewhat improved. With somewhat more reservation than appears in many current trade interpretations, we take it that Russia is likely to ship out less wheat in 1932–33 than in 1931–32, perhaps 20–50 million bushels less. With stocks of old-crop wheat probably low, with acreage reduced and prospects for spring wheat apparently not favorable, with smaller governmental collections planned and wider latitude permitted to the private trade, and with export offers and charterings thus far smaller this year than in 1930 or 1931, no other interpretation seems tenable.

Even if Russia and the Danube countries together should find only, say, 50 million bushels for export, the margin between aggregate world requirements and aggregate surpluses would be wide. The surpluses would fall not far from 1,050 million bushels, the requirements below 750 million. With little change in surpluses and with smaller requirements in 1932–33 as compared with 1931–32, the margin can hardly differ widely unless the crops of 1932 in the exporting countries prove to be a good deal larger or smaller than current indications suggest. The prospect, of course, may change; but at present a continued easy international statistical position, more or less like what has prevailed since 1928–29, is in prospect for 1932–33. In the coming year Canada almost certainly and Australia probably will export more wheat and flour than in 1931–32; the Danube countries certainly and Russia probably will export less. Such exports as move in August–December must come more largely from North America than was true in 1931–32, for Argentina and Australia have smaller stocks of old-crop wheat, and Russian and Danubian shipments of new-crop wheat will be smaller.

PRICES

On August 20 the December future in Liverpool closed near 56 cents, the Chicago near 54, the Winnipeg near 49. The first two were less than 5 cents above the mid-July lows, and Winnipeg was even below.

The world statistical position of wheat as discussed above, as it now begins to take form, does not in itself suggest a sizable recovery of wheat prices. The world inward carryover is large enough, and the Northern Hemisphere crop promises to be large enough, to make fears of international shortage unwarranted except in the unlikely event of crop failure in the Southern Hemisphere unprecedented in the present century. Given average yields per sown acre in the Southern Hemisphere and even small exports from Russia, the surplus situation characteristic since 1928–29 bids fair to remain without significant change. European importers again need feel no anxiety regarding the physical adequacy of wheat supplies. Even if there should be reductions from the crop appraisals now current, shrinkage of surplus-disposition items (feed use and exports to China) induced by higher prices would release substantial supplies for food use.

The statistical prospect for wheat price changes between August 20 and next January is far from clear, even with the commodity position of wheat for 1932–33 beginning to take form. A substantial advance is not impossible. Perhaps the most favorable combination of factual circumstances (among those in the wheat position itself that lie within the realm of possibility) would be unfavorable harvest weather

in Europe and Canada; a turn for the worse in Southern Hemisphere crop progress; unexpectedly small exports and offers from Russia; and very slow marketings of North American crops.

That the first three of these would affect prices favorably seems obvious. Slow marketing of North American wheat assumes this fall a significance which it might not have in the absence of the necessity for importers to obtain the bulk of their supplies from North America at least in August–December. Other things equal, strong holding in North America would tend to compel Liverpool futures to rise while North American futures held firm.

No one is in a position to foresee clearly how these influences will develop or what weight ought to be given to each, and no one knows whether or not significant new developments will appear. Clearly, however, bad weather in Europe, Canada, and the Southern Hemisphere during September–December is not now probable; the usual rather than the unusual is still the reasonable expectation of weather weeks or months in advance. Furthermore, we see no compelling reason why Russian exports should prove *unexpectedly* small, for rather small exports are now generally anticipated. So far as concerns slow marketing of wheat in the United States, this has already been in evidence; but so many farmers need money, and so few bankers are probably in a position to undertake the risks involved or would neglect to call loans on even a small rise in price, that the holding movement does not in our judgment bid fair to assume really significant price-influencing proportions. Canada has altogether too much wheat from carryover and new crop to hold a large fraction of it strongly, and selling pressure from Canada is probable, especially if Southern Hemisphere crops progress favorably.

Our appraisal of the wheat situation itself now suggests that, with wheat prices already so low, the Liverpool December future is not likely before it closes to fall more than 10 cents below the closing price on August 20. Prices more than 15 cents higher, except as they may represent a level near the peak of a temporary rise, are likewise improbable unless Northern Hemisphere crop estimates are reduced, and/or Russian exports prove unexpectedly small, and/or Southern Hemisphere crops progress unfavorably. Either the Chicago–Liverpool or the Winnipeg–Liverpool spread, or both, will probably be wider in September–December than in June–August. But recent experience gives little basis for assuming, even with much reduced stabilization holdings, that large exportable supplies in the United States must cause the Chicago–Liverpool spread to widen to a full shipping differential.

The above has been written without reference to the business depression. For a number of weeks prior to August 20, numerous signs at home and abroad have suggested that upturn from the trade depression has begun. Prices of bonds, stocks, and raw materials have risen, not universally nor regularly, but significantly. An increased willingness to acquire stocks has appeared. If this tendency should evolve into a definitive upward trend, the effect upon the Liverpool wheat price (other things equal in respect of supply and demand) may be one of three: the wheat price may rise faster than other prices, or about as fast, or it may lag. If, on the contrary, it should unfortunately come to pass that definitive recovery has not commenced, this likewise will influence wheat prices. The effect of delayed recovery would be to minimize the influence of commodity considerations tending to raise the wheat price and to exaggerate opposing influences.

We have pointed out above the difficulty of adjudging the future wheat price movement on the basis of considerations of supply and demand, other things equal. With respect to the relation of the wheat price to the general price level and to the business depression, two limitations stand clearly before us: we possess no precedent for the present world-wide depression, and we possess no precedent for the present circumstances in the wheat market of the world in relation to a depression. The impossibility of evaluating the commodity relations and the general relations separately, and thereafter in their bilateral reactions, prevents us from undertaking any forecast.

This issue was written by M. K. Bennett, Helen C. Farnsworth, and Joseph S. Davis, with the advice and assistance of the staff of the Institute

APPENDIX

TABLE I.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING AREAS AND COUNTRIES, 1926–31*

(Million bushels)

Year	World	World ex-Russia	Northern Hemisphere ex-Russia	Four chief exporters	United States		Canada	Australia	Argentina	USSR	Lower Danube[a]	Other Europe	Northern Africa[b]	India
					Winter	Spring								
1926	4,287	3,373	2,930	1,632	632	202	407	161	230	914	294	921	99	325
1927	4,374	3,589	3,124	1,755	548	327	480	118	282	785	272	1,001	109	335
1928	4,830	3,923	3,353	2,002	591	335	567	160	349	807	367	1,042	108	291
1929	4,115	3,421	3,062	1,408	577	236	305	127	163	694	303	1,147	123	321
1930	4,675	3,686	3,187	1,728	602	256	421	213	236	989	353	1,009	104	391
1931	.....	3,630	3,150	1,613	789	105	304	189	226	...	368	1,072	115	347
1932	.....	*3,660*	*3,130*	*1,653*	442	281	*460*	*240*	*230*	...	*258*	*1,200*	*122*	337
Average 1926–30 .	4,436	3,598	3,131	1,705	590	271	436	156	252	838	318	1,024	109	333

Year	Hungary	Jugo-Slavia	Roumania	Bulgaria	Morocco	Algeria	Tunis	Egypt	British Isles	France	Germany	Italy	Belgium	Netherlands
1926	74.9	71.4	110.9	36.5	25.0	23.6	13.0	37.2	52.2	231.8	95.4	220.6	12.8	5.49
1927	76.9	56.6	96.7	42.1	28.2	28.3	8.1	44.3	57.2	276.1	120.5	195.8	16.3	6.16
1928	99.2	103.3	115.5	49.2	28.1	30.3	12.1	37.3	51.0	281.3	141.6	228.6	17.2	7.34
1929	75.0	95.0	99.8	33.2	31.8	33.3	12.3	45.2	50.9	337.3	123.1	260.1	13.2	5.47
1930	84.3	80.3	130.8	57.3	21.3	32.2	10.4	39.8	43.4	228.1	139.2	210.1	13.2	6.06
1931	72.6	98.8	135.3	61.2	29.7	25.5	14.0	46.1	38.5	269.6	155.5	248.0	13.8	6.75
1932	58.2	....	73.5	53.9	22.0	30.0	17.3	....	41.4[c]	.....	188.7	253.0	13.9	13.76
Average 1926–30 .	82.1	81.3	110.7	43.7	26.9	29.5	11.2	40.8	50.9	270.9	124.0	223.0	14.5	6.10

Year	Scandinavia[d]	Baltic States[e]	Spain	Portugal	Switzerland	Austria	Czecho-Slovakia	Poland	Greece	Mexico	Japan, Chosen	South Africa	Chile, Uruguay	New Zealand
1926	21.5	7.8	146.6	8.6	4.24	9.4	39.9	52.5	12.4	10.3	38.7	8.3	33.5	7.95
1927	25.3	10.0	144.8	11.4	4.34	12.0	47.2	61.1	13.0	11.9	38.3	5.8	46.0	9.54
1928	31.3	10.9	122.6	7.5	4.47	12.9	52.9	59.2	13.1	11.0	39.4	7.4	42.0	8.83
1929	31.5	14.0	154.2	10.8	4.37	11.6	52.9	65.9	11.4	11.3	38.8	11.1	46.7	7.24
1930	31.8	18.2	146.7	13.8	3.60	12.0	50.6	82.3	9.7	11.4	38.5	10.2	28.6	7.06
1931	28.7	14.6	134.4	12.0	4.36	9.4	41.2	83.2	12.2	16.2	39.2	11.3	34.8	....
1932	....	....	161.4	18.2	4.19	...	....	....	18.4	9.1	40.8	....	....	....
Average 1926–30 .	28.3	12.2	143.0	10.4	4.20	11.6	48.7	64.2	11.9	11.2	38.7	8.6	39.4	8.12

* Data of U.S. Department of Agriculture and International Institute of Agriculture. Totals given in first three columns exclude China, Asia Minor, and a few minor producing areas. Dots (. . .) indicate that data are not available. Figures for 1932 in italics represent rough approximations; see text, pp. 470–75.

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

[b] Morocco, Algeria, Tunis, Egypt.

[c] England and Wales only; other areas about 3.5.

[d] Denmark, Norway, Sweden.

[e] Finland, Latvia, Estonia, Lithuania.

TABLE II.—WHEAT RECEIPTS IN NORTH AMERICA, WEEKLY, APRIL–JULY 1932*

(Million bushels)

Week ending	United States			Canada		
	14 primary markets[a]	Southwest[b]	Minneapolis, Duluth	Fort William, Port Arthur	Vancouver, Prince Rupert	Total
Apr. 2	2.25	0.94	0.58	1.25	1.72	2.97
9	2.19	1.03	0.51	0.85	1.93	2.78
16	2.82	1.49	0.66	0.65	1.62	2.27
23	4.45	2.37	0.83	1.12	0.86	1.98
30	3.00	1.59	0.73	2.90	1.62	4.52
May 7	2.90	1.75	0.83	1.68	1.56	3.24
14	3.62	1.66	1.01	1.09	1.02	2.11
21	3.48	1.75	0.81	1.03	1.15	2.18
28	4.19	2.17	1.04	1.51	1.73	3.24
June 4	3.43	1.61	1.09	2.59	1.43	4.02
11	3.06	1.81	0.84	3.97	1.54	5.51
18	2.44	1.57	0.61	5.25	1.79	7.04
25	3.49	2.46	0.58	8.43	2.02	10.45
July 2	3.29	2.14	0.63	6.13	1.70	7.83
9	7.18	5.54	0.70	4.39	1.44	5.83
16	9.64	6.45	0.52	3.94	0.85	4.79
23	12.02	6.42	0.68	3.63	0.75	4.38
30	11.06	5.47	0.91	3.17	0.64	3.81

* United States data are unofficial figures compiled from the Chicago *Daily Trade Bulletin;* Fort William and Port Arthur data are official figures for net receipts furnished by Canadian Board of Grain Commissioners; Vancouver and Prince Rupert data are official figures for weeks ending Friday, compiled from *Canadian Grain Statistics.*

[a] Chicago, Detroit, Duluth, Indianapolis, Kansas City, Milwaukee, Minneapolis, Omaha, Peoria, Sioux City, St. Joseph, St. Louis, Toledo, and Wichita.

[b] Kansas City, Omaha, Wichita, and Galveston.

TABLE III.—WHEAT RECEIPTS IN NORTH AMERICA, MONTHLY, FEBRUARY–JULY, 1927 TO 1932*

(Million bushels)

Year	Feb.	Mar.	Apr.	May	June	July	July–June[a]
	UNITED STATES (14 primary markets)[b]						
1927	21.0	16.6	14.4	19.3	20.7	58.8	403.2
1928	22.5	26.3	17.9	25.9	15.5	72.6	496.2
1929	28.7	27.2	17.5	18.6	25.7	94.2	531.2
1930	19.9	16.7	13.4	16.5	18.7	99.0	425.4
1931	30.7	30.8	21.2	30.9	29.7	104.0	494.9
1932	25.0	13.4	13.2	15.3	13.5	42.6	374.8
	CANADA (leading terminal markets)[b]						
1927	12.8	12.2	16.2	18.9	8.0	10.8	298.5
1928	22.1	13.7	11.8	25.0	23.8	16.8	356.4
1929	12.2	20.7	17.0	17.7	17.7	17.9	419.7
1930	8.1	8.5	5.7	10.5	27.3	17.5	203.7
1931	12.9	10.5	13.3	18.2	25.3	15.4	251.2
1932	9.2	11.5	12.5	12.7	31.8	....	.....

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

[a] For United States, July–June, 1926–27 to 1931–32; for Canada, September–July, 1926–27 to 1931–32.

[b] As in Table II.

TABLE IV.—UNITED STATES AND CANADIAN CARRYOVERS OF WHEAT, FROM 1926*

(Million bushels)

Year	United States (July 1)						Canada (July 31)						
	On farms	In country mills and elevators	Commercial stocks	In city mills[a]	Total four positions	U.S. grain in Canada	On farms	In country mills and elevators[b]	In terminal elevators	In transit	In flour mills	Total five positions	Canadian grain in U.S.[c]
1926	21.0	29.5	16.5[d]	31.9	98.9	1.0	3.9	1.3[e]	24.1	3.2	3.9	36.4	3.7
1927	27.2	21.8	21.1	48.3	118.4	1.4	4.2	1.5[e]	35.6	2.3	4.2	47.8	4.8
1928	23.7	19.3	38.6	42.8	124.4	2.5	4.2	4.7[e]	48.9	13.7	6.1	77.6	13.6
1929	45.4	41.5	90.4	64.5	241.8	3.3	5.6	6.3	76.3	8.7	7.5	104.4	22.9
1930	47.4	60.2	109.3	73.9[f]	290.8	4.7	5.3	16.8	69.3	12.8	6.9	111.1	16.1
1931	31.9	30.3	204.0	52.4[f]	318.6	15.3	19.5	34.1	71.1	7.3	2.1[g]	134.1	5.5
1932	71.9	41.8	168.4	80.5[f]	362.6	15.9	7.5	33.5	78.6	9.3	2.0[g]	130.9	4.7

* Official data of U.S. Department of Agriculture and Dominion Bureau of Statistics, chiefly from *Agriculture Yearbooks, Canada Year Books,* and press releases.

[a] Wheat stocks in, and in transit to, city mills reported to the Census Bureau, raised by the U.S. Department of Agriculture to 100 per cent to account for stocks in nonreporting mills.

[b] Strictly, "in country, private, and mill elevators in the Western Division," except as noted.

[c] In bond for export as wheat; excludes some bonded wheat in transit by rail.

[d] Bradstreet's visible.

[e] Wheat stocks "in country, private, and manufacturing elevators in the Western Division."

[f] Includes estimates by the U.S. Department of Agriculture of 12.5, 18.4, and 7.1 million bushels "stored for others" in city mills in 1930, 1931, and 1932, respectively.

[g] In the Eastern Division only; stocks in flour mills in the Western Division, formerly included "in flour mills," are now reported as "in country, private, and mill elevators in the Western Division."

TABLE V.—WHEAT VISIBLE SUPPLIES, APRIL–JULY 1932, WITH COMPARISONS*

(Million bushels)

Date	Total	U.S. grain		Canadian grain		Total North America	Afloat to Europe	U.K. ports	Total U.K. and afloat	Australia	Argentina
		United States	Canada	Canada	United States						
Apr. 1, 1927....	310.0	49.9	0.4	104.7	6.6	161.6	75.7	5.0	80.7	53.0	14.7
1928....	344.0	68.8	1.0	133.6	16.0	219.4	68.4	7.7	76.1	36.0	12.5
1929....	462.8	124.7	1.6	166.0	23.7	316.0	71.0	8.0	79.0	53.0	14.8
1930....	469.2	153.1	5.9	171.9	24.5	355.4	34.2	13.0	47.2	56.0	10.6
1931....	554.2	213.6	5.2	170.3	11.1	400.2	48.0	12.6	60.6	84.2	9.2
Aug. 1, 1927....	150.2	33.7	1.3	37.8	4.8	77.6	46.1	7.8	53.9	12.8	5.9
1928....	201.6	63.1	2.3	52.4	13.6	131.4	44.7	10.1	54.8	9.5	5.9
1929....	325.4	136.4	2.3	83.8	22.9	245.4	37.6	6.2	43.8	20.0	16.2
1930....	357.7	161.9	4.0	89.5	16.1	271.5	39.2	6.5	45.7	33.5	7.0
1931....	442.9	233.6	22.9	105.8	5.5	367.8	37.9	10.6	48.5	20.0	6.6
1932											
Apr. 2.....	583.9	207.2	27.6	172.9	11.7	419.4	58.7	15.4	74.1	75.0	15.4
9.....	574.3	202.7	27.5	171.0	10.9	412.1	58.8	15.1	73.9	72.5	15.8
16.....	558.1	195.6	27.3	167.1	9.6	399.6	58.7	15.2	73.9	68.0	16.6
23.....	541.7	191.2	27.3	161.5	7.3	387.3	55.8	16.0	71.8	66.0	16.6
30.....	525.1	186.5	26.9	159.7	4.6	377.7	54.8	14.4	69.2	62.0	16.2
May 7.....	519.3	182.1	26.0	156.2	4.5	368.8	61.2	13.5	74.7	59.2	16.6
14.....	505.2	176.9	23.8	150.2	6.7	357.6	63.2	12.6	75.8	56.0	15.8
21.....	496.1	175.4	22.2	147.2	5.8	350.6	65.3	11.6	76.9	53.2	15.4
28.....	480.7	174.1	18.1	141.7	7.2	341.1	63.1	11.3	74.4	50.5	14.7
June 4.....	469.1	176.2	17.5	137.9	6.0	337.6	59.0	10.4	69.4	48.5	13.6
11.....	458.3	174.5	16.7	134.7	4.9	330.8	57.7	10.4	68.1	46.5	12.9
18.....	450.0	172.3	16.1	132.1	3.5	324.0	58.3	9.7	68.0	45.5	12.5
25.....	439.7	168.8	16.1	133.6	4.1	322.6	51.9	9.4	61.3	44.0	11.8
July 2.....	432.7	168.4	15.9	135.1	4.6	324.0	45.2	11.0	56.2	41.5	11.0
9.....	422.6	168.4	15.6	132.6	5.3	321.9	40.6	11.3	51.9	39.2	9.6
16.....	416.7	170.6	15.6	131.0	6.0	323.2	36.4	11.1	47.5	36.8	9.2
23.....	401.2	175.1	15.5	124.1	5.4	320.1	33.3	10.4	43.7	30.0	7.4
30.....	385.5	175.9[a]	15.4	116.8	4.7	312.8	31.4	9.1	40.5	26.0	6.2

* *Commercial Stocks of Grain in Store in Principal U.S. Markets; Canadian Grain Statistics; Corn Trade News.*

[a] Excluding stocks at Toledo, which were 3.2 million bushels on July 23.

TABLE VI.—UNITED STATES FLOUR PRODUCTION, EXPORTS, AND NET RETENTION, FROM 1926–27*

(Million barrels)

Year	Feb.	Mar.	Apr.	May	June	July–June	July	Feb.	Mar.	Apr.	May	June	July–June	July
	PRODUCTION: ALL REPORTING MILLS							PRODUCTION: ESTIMATED TOTAL						
1927.....	8.0	8.9	8.3	8.5	8.5	111.0	8.4	8.8	9.8	9.1	9.3	9.4	122.0	9.2
1928.....	9.0	9.8	8.5	8.7	7.8	111.2	8.5	9.7	10.5	9.2	9.4	8.4	120.6	9.2
1929.....	9.0	9.2	8.6	9.3	8.9	115.3	9.3	9.6	9.8	9.2	10.0	9.6	123.6	10.0
1930.....	8.8	9.3	9.1	9.0	8.7	114.6	9.5	9.4	10.0	9.7	9.6	9.3	122.5	10.1
1931.....	8.2	8.7	8.5	8.0	7.8	109.9	9.9	8.8	9.4	9.1	8.6	8.3	117.6	10.5
1932.....	7.7	8.5	8.2	7.7	7.8	105.8	...	8.3	9.1	8.8	8.3	8.4	113.4	....
	EXPORTS AND SHIPMENTS TO POSSESSIONS							ESTIMATED NET RETENTION						
1927.....	0.90	0.93	1.06	1.16	0.91	14.02	0.84	7.9	8.9	8.0	8.2	8.4	108.0	8.4
1928.....	1.00	1.05	1.04	0.90	0.72	13.38	0.68	8.7	9.5	8.1	8.5	7.7	107.2	8.5
1929.....	1.27	1.24	1.12	0.99	1.05	13.55	1.13	8.4	8.6	8.1	9.0	8.5	110.0	8.9
1930.....	0.97	1.10	0.98	1.10	1.00	13.59	0.99	8.4	8.9	8.7	8.5	8.3	108.9	9.1
1931.....	0.81	0.78	0.81	0.84	0.87	12.35	1.05	8.0	8.6	8.3	7.8	7.5	105.2	9.5
1931.....	0.75	0.65	0.58	0.39	0.47	8.93	....	7.5	8.4	8.2	7.9	7.9	104.5	...

* Reported production and trade data from U.S. Department of Commerce press releases, *Monthly Summary of Foreign Commerce*, and *Foodstuffs 'Round the World*. The estimates of total United States production are based on a detailed, but still partially incomplete, study of relations between monthly reported output and census totals.

TABLE VII.—INTERNATIONAL SHIPMENTS OF WHEAT AND FLOUR, WEEKLY, APRIL–JULY, 1932*

(Million bushels)

Week ending	Total	Shipments from							Shipments to Europe				To ex-Europe		
		North America	Argentina, Uruguay	Australia	South Russia	Danube	India	Other countries	Total	United Kingdom	Orders	Continent	Total	China, Japan	Others
Apr. 2.....	15.66	6.10	4.23	3.94	0.22	0.92	...	0.24	10.25	2.43	2.13	5.69	5.41	2.42	2.99
9.....	14.76	4.86	5.08	3.94	0.15	0.61	...	0.13	10.89	2.58	3.25	5.06	3.87	2.67	1.20
16.....	15.92	7.30	4.53	3.14	....	0.77	...	0.18	11.45	1.74	3.76	5.95	4.47	1.89	2.58
23.....	16.38	7.52	4.43	3.18	0.22	0.70	...	0.32	12.60	3.69	3.50	5.41	3.78	2.16	1.62
30.....	18.07	7.68	5.37	3.74	....	1.07	...	0.22	14.37	3.26	6.09	5.02	3.70	1.55	2.15
May 7.....	19.98	8.86	4.45	5.47	....	1.06	...	0.14	16.53	3.55	5.46	7.52	3.45	2.17	1.28
14.....	18.70	9.72	3.83	4.34	....	0.65	...	0.16	15.70	3.44	5.76	6.50	3.00	1.35	1.65
21.....	15.37	6.38	3.54	4.74	....	0.53	...	0.17	12.91	3.85	3.89	5.17	2.46	0.89	1.57
28.....	13.45	6.56	2.04	4.18	....	0.56	...	0.10	10.52	2.70	2.57	5.25	2.93	1.59	1.34
June 4.....	14.89	8.35	3.02	3.02	....	0.34	...	0.15	12.43	3.82	2.65	5.96	2.46	0.56	1.90
11.....	14.90	7.34	3.65	3.22	....	0.49	...	0.20	11.49	3.23	3.38	4.88	3.41	1.12	2.29
18.....	12.95	7.76	2.07	2.41	....	0.24	...	0.47	10.60	2.42	1.96	6.22	2.35	1.06	1.29
25.....	10.00	5.31	2.00	1.84	....	0.45	...	0.40	7.46	1.61	1.55	4.30	2.54	1.14	1.40
July 2.....	10.75	6.54	1.05	2.13	....	0.31	...	0.72	8.32	2.80	1.00	4.52	2.43	0.86	1.57
9.....	10.59	5.89	1.98	1.90	....	0.22	...	0.61	8.34	1.58	1.92	4.84	2.25	1.17	1.08
16.....	8.62	4.58	0.48	2.58	....	0.31	...	0.67	7.05	2.49	1.31	3.25	1.57	0.20	1.37
23.....	8.84	5.88	0.31	1.63	....	0.20	...	0.82	6.99	2.89	0.48	3.62	1.85	0.45	1.40
30.....	9.19	6.55	0.50	1.55	....	0.17	...	0.42	7.58	2.79	0.70	4.09	1.61	0.68	0.93

* Here converted from data in Broomhall's *Corn Trade News*.

TABLE VIII.—UNITED STATES WHEAT AND FLOUR TRADE, FROM 1925–26*

(Thousand bushels)

Year	Feb.	Mar.	Apr.	May	June	July–June[a]	July	Feb.	Mar.	Apr.	May	June	July–June[a]	July
	EXPORTS OF WHEAT GRAIN							EXPORTS OF FLOUR AS WHEAT						
1926.....	1,700	3,770	2,533	9,368	8,074	63,188	16,091	3,042	3,268	3,919	3,190	3,135	44,845	3,728
1927.....	4,889	5,084	11,363	8,960	7,459	157,060	8,397	4,108	4,099	4,774	5,163	4,056	62,909	3,703
1928.....	2,276	2,740	2,723	4,823	5,006	145,998	4,153	4,449	4,752	4,687	3,970	3,225	60,260	3,040
1929.....	3,214	3,487	3,942	11,741	4,564	103,113	8,691	5,734	5,603	5,209	4,386	4,438	60,573	5,093
1930.....	5,185	2,415	3,050	5,433	8,066	92,176	11,934	4,350	4,907	4,388	4,776	4,409	61,070	4,442
1931.....	137	1,397	3,531	6,407	8,136	76,278	12,731	3,580	3,360	3,576	3,707	3,871	55,259	4,723
1932.....	4,649	5,749	9,354	7,283	6,088	96,425	.....	3,346	2,804	2,531	1,547	1,998	39,276	.....
	IMPORTS OF WHEAT GRAIN[b]							NET EXPORTS OF WHEAT AND FLOUR[c]						
1926.....	520	94	173	1,548	1,012	15,597	846	4,244	6,961	6,290	11,038	10,203	92,670	18,980
1927.....	973	108	848	671	488	13,235	476	8,029	9,079	15,289	13,454	11,022	205,995	11,623
1928.....	1,764	1,698	465	2,108	1,127	15,705	2,068	4,963	5,816	6,947	6,690	7,104	190,578	5,127
1929.....	1,755	1,503	1,434	1,573	1,022	21,418	1,226	7,193	7,587	7,731	14,558	7,994	142,309	12,568
1930.....	1,674	2,449	804	1,224	1,655	12,949	1,336	7,864	4,871	6,636	9,001	10,820	140,361	15,041
1931.....	1,005	1,201	1,779	1,067	1,347	19,054	1,644	2,714	3,557	5,342	9,047	10,660	112,497	15,810
1932.....	776	724	795	640	876	12,884	.....	7,219	7,832	11,087	8,190	8,068	123,672	.....

* Official data from *Monthly Summary of Foreign Commerce* and direct from the Bureau of Foreign and Domestic Commerce. Exports exclude shipments to Alaska, Hawaii, Porto Rico. See WHEAT STUDIES, May 1932, Appendix Table IX, for comparable October–February data.

[a] July–June, 1925–26 to 1931–32.

[b] Almost wholly from Canada for milling in bond into flour for export.

[c] After adding wheat and flour re-exports and deducting flour imports. Domestic flour converted to equivalent bushels of wheat at 4.7 bushels per barrel of flour; foreign flour at 4.5 bushels per barrel of flour.

TABLE IX.—NET EXPORTS AND NET IMPORTS OF WHEAT AND FLOUR, MONTHLY FROM AUGUST 1931*

(Million bushels)

A. NET EXPORTS

Month	United States	Canada	Argentina	Australia	Four exporters	Hungary	Jugo-Slavia	Roumania	Bulgaria	Four Danube exporters	Poland	Algeria	Tunis	India
Aug.	10.56	14.24	5.43	8.04	38.27	1.32	4.35	18.56	0.45	30.15	0.14	0.57	1.28	0.02
Sept.	10.64	16.82	6.96	10.89	45.31	2.08	1.72		1.67		0.21		0.52	0.17
Oct.	13.69	21.41	5.58	7.72	48.40	3.47	1.55	5.88	1.50	12.40	0.18	0.38	0.21	0.28
Nov.	12.51	29.58	5.87	6.48	54.44	4.44	1.80	5.76	1.38	13.38	0.26		0.20	0.22
Dec.	11.30	24.36	7.62	9.40	52.68	2.32	1.19	1.80	0.66	5.97	(0.09)	0.19	0.14	0.22
Jan.	6.87	10.95	12.13	19.71	49.66	0.68	0.62	1.37	0.80	3.47	0.06	1.06	(0.03)	0.16
Feb.	7.22	11.41	17.72	21.11	57.46	0.31	0.30	1.16	1.28	3.05	0.36		0.03	0.18
Mar.	7.83	11.77	29.24	19.38	68.22	0.58	0.70	0.59	1.31	3.18	0.51	0.54	0.34	0.22
Apr.	11.09	8.66	19.42	15.75	54.92	0.67	1.32	1.35	0.90	4.24	0.63	....	0.37	0.15
May	8.19	17.60	13.31	17.89	56.99	0.88	0.27	....	0.58	....	0.37	....	0.18	0.16
June	8.07	18.42	8.62	11.40	46.51	1.26	0.88	1.37	0.43	2.94	0.32	....	2.84	0.14
July	....	21.62	.....	.....	.....	....	....	....	....	....	....	....	....	....

B. NET IMPORTS

Month	United Kingdom	Irish Free State	British Isles total	Three variable importers				Belgium	Netherlands	Denmark	Norway	Sweden	Scandinavia total	Switzerland
				Total	Italy	Germany	France[a]							
Aug.	23.07	1.87	24.94	8.68	0.71	1.74	7.23	3.81	1.79	0.91	0.60	0.34	1.85	1.72
Sept.	31.89	1.94	33.83	5.12	0.54	(0.56)	5.14	3.98	3.16	2.14	0.44	0.32	2.90	2.08
Oct.	28.59	2.38	30.97	7.32	0.58	(0.37)	7.11	5.05	1.84	3.01	0.94	0.47	4.42	2.62
Nov.	22.42	1.20	23.62	5.63	0.97	(0.19)	4.85	3.74	2.65	2.76	1.37	0.90	5.03	1.87
Dec.	15.60	1.65	17.25	6.60	0.59	1.06	4.95	4.20	2.75	1.76	0.95	0.65	3.36	2.26
Jan.	10.29	1.05	11.34	6.23	1.44	1.62	3.17	2.54	2.70	0.97	0.61	0.63	2.21	1.64
Feb.	17.12	1.28	18.40	7.46	2.24	2.42	2.80	2.51	2.36	0.82	1.04	0.38	2.24	0.96
Mar.	19.54	1.94	21.48	10.25	3.98	1.43	4.84	2.68	2.42	1.08	0.63	0.64	2.35	1.46
Apr.	17.39	1.94	19.33	17.04	5.79	1.34	9.91	3.78	2.22	0.82	0.78	0.68	2.28	1.52
May	16.89	....	....	17.82	6.66	1.87	9.29	4.74	2.03	1.08	0.21	0.21	1.50	1.51
June	18.93	1.64	20.57	25.02	6.70	7.20	11.12[b]	5.16	3.00	1.21	0.66	1.12	2.99	1.47
July	....	....	....	.....	....	....	....	....	2.48	....	....	....	....	....

B. NET IMPORTS (*Continued*)

Month	Austria	Czecho-Slovakia	Greece	Spain	Portugal	Finland	Latvia	Estonia	Lithuania	Four Baltic States	Egypt	Japan	New Zealand	Union of South Africa
Aug.	0.66	1.67	1.78	(0.01)	0.51	0.41	0.07	0.07	0.00	0.55	0.40	0.67	0.09	0.46
Sept.	0.83	2.50	2.25	(0.01)	0.21	0.41	0.10	0.04	0.00	0.55	1.35	0.55	0.03	
Oct.	1.04	2.52	2.20	0.00	0.08	0.66	0.11	0.08	0.00	0.85		1.56	0.04	0.20
Nov.	1.84	2.71	1.91	0.05	0.05	0.85	0.08	0.03	0.00	0.96	1.23	1.03	0.04	0.22
Dec.	1.87	2.82	1.80	(0.01)	0.12	0.24	0.05	0.03	(0.01)	0.31	0.35	1.45	0.11	
Jan.	1.43	1.46	1.64	0.00	0.01	0.16	0.04	0.02	(0.01)	0.21	0.59	1.70	0.08	0.62
Feb.	0.70	1.52	2.08	0.00	0.03	0.18	0.07	0.02	(0.02)	0.25	0.82	3.22		
Mar.	1.16	1.84	2.28	(0.01)	0.06	0.25	0.06	0.03	(0.02)	0.32	1.58	2.90	0.06	
Apr.	0.91	1.87	2.01	0.00	0.04	0.22	0.03	0.05	(0.00)	0.30		2.01	0.08	
May	0.72	1.88	2.93	(0.21)	0.12	0.35	0.05	0.06	(0.01)	0.45	....	1.62	....	....
June	1.53	1.90	1.95	2.27	0.23	0.31	....	0.02	(0.00)	....	....	4.01	....	....

* Data from official sources and International Institute of Agriculture. Dots (...) indicate that data are not available. Figures in parentheses represent: Under A, net imports; under B, net exports.

[a] Net imports in "commerce général," compiled directly from *Statistique mensuelle du commerce extérieur de la France.*

[b] Net imports in "commerce special."

TABLE X.—PRICES OF REPRESENTATIVE WHEATS IN BRITISH MARKETS AND PRINCIPAL EXPORTING COUNTRIES, WEEKLY, APRIL–JULY 1932*

(U.S. cents per bushel)

Week ending	U.K. Liverpool						United States					Canada		Argentina
	British parcels	No. 1 Manitoba	No. 3 Manitoba	No. 2 Hard Winter	Argentine Rosafé	Australian F.A.Q.	All classes and grades: 6 markets	No. 2 Hard Winter Kansas City	No. 2 Red Winter St. Louis	No. 1 Northern Spring Minneapolis	No. 2 Amber Durum Minneapolis	Weighted average Winnipeg	No. 3 Manitoba Winnipeg	80-kilo Buenos Aires
Apr. 2....	60	70[a]	66	60	55	63	57	48	52	66	72	51	47	46
9....	63	72[a]	67	62	57	64	58	51	56	70	75	52	49	47
16....	64	75[a]	66	65	59	64	62	55	58	72	76	55	51	47
23....	64	73[a]	66	64	59	66	61	54	57	73	73	55	50	48
30....	62	72	65	62	57	63	60	52	56	68	66	53	48	48
May 7....	60	68	62	n.q.	56	62	57	51	53	66	65	52	48	48
14....	62	68	62	n.q.	59	62	58	52	54	65	68	53	50	49
21....	61	69	62	62	60	62	61	53	55	71	68	53	50	49
28....	62	68	62	66	60	63	64	57	58	70	69	54	50	49
June 4....	62	68	62	63	60	64	59	53	54	66	64	51	48	50
11....	56	60	55	57	56	61	55	48	50	62	56	46	43	47
18....	54	58	53	55	53	57	54	46	49	60	57	45	42	44
25....	54	58	55	54	52	55	49	43	47	58	55	45	42	45
July 2....	53	58	53	55	53	55	49	43	47	57	55	45	42	44
9....	52	57[a]	53	56	55	52[a]	47	45	48	61	54	45	42	43
16....	52	57[a]	52	n.q.	54	53[a]	47	45	49	58	52	44	42	43
23....	53	57	53	54	54	53[a]	47	44	47	55	53	45	43	43
30....	56	59[a]	55	55	55	56[a]	49	46	49	58	55	48	46	..

* For sources and methods of computation, see WHEAT STUDIES, January 1932, Appendix Table XXIII.
[a] Parcels to London.

TABLE XI.—MONTHLY AVERAGE PRICES OF DOMESTIC WHEAT IN EUROPE, JANUARY–JULY, FROM 1927*

(U.S. cents per bushel)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Jan.	Feb.	Mar.	Apr.	May	June	July
	GERMANY (BERLIN)							FRANCE (PARIS)						
1927.....	172	172	173	176	192	196[a]	n.q.	191	185	178	185	193	194	185
1928.....	152	149	159	172	173	166	160	164	163	172	181	195	191	182
1929.....	135	140	144	145	141	139	162	165	169	172	170	168	167	170
1930.....	160	152	155	175	187	195	187	144	137	141	141	135	140	171
1931.....	168	177	186	187	183	176	155	179	187	190	197	195	199	186
1932.....	146	158	161	170	176	165	...	168	173	178	182	184	180	179
	ITALY (MILAN)							GREAT BRITAIN						
1927.....	213	211	211	202	216	199	180	155	154	152	150	158	165	164
1928.....	193	194	200	209	214	210	177	129	126	127	134	143	143	141
1929.....	192	196	195	193	189	191[b]	177	125	127	127	128	129	125	135
1930.....	194	189	186	194	196	202	177	124	116	108	113	114	111	108
1931.....	149	154	149	152	160	143	131	73	67	67	69	75	78	82
1932.....	150	163	167	166	171[b]	159[c]	139[b]	54	53	59	60	61	62	61

* For sources and methods of computation, see WHEAT STUDIES, January 1932, Appendix Tables XXIV*a*, XXIV*b*.
[a] First half of June. [b] Three-week average. [c] One week only.

TABLE XII.—WHEAT DISPOSITION ESTIMATES FOR FOUR MAJOR EXPORTING COUNTRIES, FROM 1926–27*

(Million bushels)

Year	Domestic supplies			Domestic disappearance				Surplus over domestic use[d]	Net exports	End-year stocks
	Initial stocks	New crop	Total	Milled (net)[a]	Seed use	Balancing item[b]	Total[c]			
	A. UNITED STATES (JULY–JUNE)									
1926–27	99	834	933	501	85	20	606	327	209	118
1927–28	118	875	993	503	93	80	676	317	193	124
1928–29	124	926	1,050	511	85	67	663	387	145	242
1929–30	242	813	1,055	509	85	27	621	434	143	291
1930–31	291	858	1,149	493	81	141	715	434	115	319
1931–32[e]	319	892	1,211	530	73	163	766	445	135	310
1931–32[f]	319	892	1,211	495	75	171	741	470	125	345
1931–32[g]	319	894	1,213	485	79	160	724	489	126	363
	B. CANADA (AUGUST–JULY)									
1926–27	36	407	443	43	39	21	103	340	292	48
1927–28	48	480	528	42	42	34	118	410	332	78
1928–29	78	567	645	44	44	47	135	510	406	104
1929–30	104	305	409	43	44	26	113	296	185	111
1930–31	111	421	532	44	39	57	140	392	258	134
1931–32[e]	133	298	431	44	42	40	126	305	235	70
1931–32[f]	133	304	437	44	42	41	127	310	235	75
1931–32[g]	134	322[h]	456	42	37	39	118	338	207	131
	C. ARGENTINA (AUGUST–JULY)									
1926–27	67	230	297	57	25	1	83	214	145	69
1927–28	69	282	351	60	27	—3	84	267	172	95
1928–29	95	349	444	61	25	6	92	352	222	130
1929–30	130	163	293	60	26	—12	77	216	151	65
1930–31	65	236	301	61	21	15	97	204	124	80
1931–32[e]	85	219	304	62	21	6	89	215	150	65
1931–32[f]	80	226	304	62	21	8	91	215	150	65
1931–32[g]	80	226	306	62	23	7	92	214	142[i]	72
	D. AUSTRALIA (AUGUST–JULY)									
1926–27	17	161	178	31	12	9	52	126	103	23
1927–28	23	118	141	32	15	—4	43	98	71	27
1928–29	27	160	187	29	15	7	51	136	109	27
1929–30	27	127	154	32	18	1	51	103	63	40
1930–31	40	213	253	32	13	6	51	202	152	50
1931–32[e]	45	170	215	32	13	5	50	165	140	25
1931–32[f]	50	175	225	32	13	5	50	175	145	30
1931–32[g]	50	189	239	32	18	3	53	186	156[j]	30

* For 1926–27 to 1930–31, condensed with necessary revisions from WHEAT STUDIES, December 1931, Appendix Tables XLI–XLIV. For 1931–32, official data so far as available, supplemented by our tentative forecasts. Net exports of wheat and flour and, from the United States, shipments to possessions.

[a] For the United States, Food Research Institute estimates of total wheat ground, less wheat equivalent of net flour exports and shipments.

[b] Derived from the two columns preceding and the column following. Includes chiefly feed and waste, but also errors in other items of supply and disappearance.

[c] Derived from total supplies and the surplus over domestic requirements.

[d] Sum of net exports and end-year stocks.

[e] Estimates as of December 1931.

[f] Estimates as of April 1932.

[g] Estimates as of August 1932.

[h] Standing official estimate plus 18 million bushels, the official appraisal of underestimation.

[i] Preliminary official data August–April, plus official data reported by International Institute May–June, plus figure for July estimated from Broomhall's shipments.

[j] July figures estimated from Broomhall's weekly shipments.

ANALYTICAL INDEX

VOLUME VIII, 1931–32

The general index consists of six separate indexes. The first covers topics discussed in four issues of *Wheat Studies*—the annual review of the crop year and the three surveys of current developments in the world wheat situation. The succeeding five parts are separate indexes of the five special studies that constitute the remainder of Volume VIII of *Wheat Studies*.

REVIEW AND SURVEY NUMBERS

TEXT

CHARTS

CYCLES IN WHEAT PRICES

ECONOMIC NATIONALISM IN EUROPE AS APPLIED TO WHEAT

RUSSIA AS A PRODUCER AND EXPORTER OF WHEAT

THE WORLD WHEAT PROBLEM

PROJECTED WATERWAYS IN NORTH AMERICA AS RELATED TO EXPORT OF WHEAT