WHEAT STUDIES

OF THE

FOOD RESEARCH INSTITUTE

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SURVEY OF THE WHEAT SITUATION
AUGUST TO NOVEMBER 1932

INTERNATIONAL trade in wheat in August–November 1932 was the smallest in a decade. With initial supplies of record size, and stringent governmental import and milling restrictions, European countries took notably little foreign wheat. Russia and the Danube countries had only small crops, and did not press wheat for export as in 1930 and 1931. Canada furnished a large portion of the total shipments; yet her supplies, particularly in visible positions, remained extremely large. United States exports were the smallest in post-war years, despite heavy supplies. Shipments to ex-Europe, mainly from Australia, were of moderate size.

After some recovery in August, international wheat prices declined in September–November under the influence of heavy supplies, favorable development of Southern Hemisphere crops, depreciation of sterling and Canadian exchange, and fading optimism in business and financial circles. New low record prices were registered in all futures markets in November–December, though prices at Chicago remained above export parity.

The year's volume of trade in wheat now seems likely to be strikingly small, probably around 645 million bushels in terms of shipments. Total end-year stocks will probably be enlarged, with increases in Canada, Argentina, and western Europe greater than decreases in the Danube basin and India. From the record low price of the Liverpool May future in mid-December, a sustained decline of as much as 5 cents before April 1 seems improbable. On the other hand, a sustained advance of 15 cents also seems improbable in the absence of sensationally bad crop news or marked improvement in business or financial conditions. A widening of the Chicago–Liverpool spread sufficient to allow free exports of United States wheat is unlikely.

STANFORD UNIVERSITY, CALIFORNIA

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SURVEY OF THE WHEAT SITUATION

AUGUST TO NOVEMBER, 1932

World wheat supplies outside of Russia and China were depressingly heavy at the beginning of 1932–33, though slightly smaller than in either of the two preceding years because of anticipated lighter Russian exports. Crops plus small inward carryovers were of record size in European importing countries. Exporting countries, too, again had large initial supplies, though not so large as in several earlier years. In Russia and the Danube basin wheat crops were small, and little wheat is available for export in 1932–33.

During August–November, Liverpool wheat futures prices (in gold) declined net by 7 cents. After a brief upward movement in August, prices drifted downward from early September to late November, and finally, on November 29, established new low records in all leading futures markets except Buenos Aires. On the same day sterling exchange fell to a new low for post-war years. Since December 1, wheat futures prices have touched still lower levels except in Chicago. The August advances rested largely on speculative buying induced by the moderately optimistic spirit which prevailed for a time in business circles. The succeeding decline of September–November was induced by the excessive supplies and by international financial disturbances, including depreciation of sterling and Canadian exchange. In the United States wheat prices remained above export parity throughout the period, though the Liverpool-Chicago price spread widened appreciably, only to narrow again in December. Unsatisfactory conditions for winter wheat in the Southwest and firm holding by United States farmers tended to keep this spread unusually narrow.

The volume of international trade in August–November 1932 was the smallest in a decade. European takings were notably light, ex-European takings of moderate size. Shipments to Europe were the smallest in post-war years because of the record European supplies and the extreme severity of restrictions on wheat imports and consumption. In some part the big decrease in European takings from the level of the two preceding years was due to smaller Russian and Danubian shipments; large shipments from these countries went to increase importers' stocks in 1930 and 1931, but not in 1932. Of the moderate shipments to ex-Europe, a relatively large proportion, about half, went to China and Japan. Almost all other ex-European countries took less wheat than usual.

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In appraising the outlook we assume maintenance of standing crop estimates, consistent new-crop developments, only moderate relaxation of European import restrictions, and fairly little change in business and financial conditions. On these assumptions, the total volume of international trade in 1931–32 now seems to us likely to approximate 645 million bushels in terms of shipments, or 665 million in terms of net exports. These figures represent a reduction of 55 million bushels from our August forecast, made necessary by upward revisions in European crop estimates and by developments during August–November.

Enlargement of end-year stocks is likely in importing Europe, mainly because of the large wheat crops, and also in Argentina. In North America the Canadian carryover will probably reach a new high level, while no appreciable reduction is in prospect in the United States, despite the small crop of 1932. With partially offsetting reductions in the Danube basin and India, the aggregate moderate increase in world wheat stocks ex-Russia and China may bring the end-year total not far below the record peak of 1931.

Since the price of the Liverpool May future was as low as 47 cents per bushel in mid-December, a sustained further decline of as

much as 5 cents per bushel before April 1 appears improbable except in the event of a combination of price-depressing developments which are not now clearly in prospect; severe depreciation of the British pound would, however, exert a strong influence in this direction. On the other hand we foresee no probable combination of bullish developments sufficient to cause a sustained advance of as much as 15 cents at Liverpool, in view of the large available world supplies, the prospective pressure of Southern Hemisphere crops, the severe restrictions on imports, and the expectation of no more than gradual improvement in the business and financial situation. Within these limits, however, fluctuations of several cents in either direction in response to unpredictable shifts in new crop and business prospects are not unlikely. Except temporarily, the Chicago May future is not likely to fall as much as 5 cents below the Liverpool May future.

I. THE WHEAT SUPPLY POSITION

World wheat supplies for 1932–33 ex-Russia continue superabundant in relation to prospective wheat requirements, but now appear slightly smaller than in either of the preceding two years. As summarized below in million bushels, initial stocks plus crops ex-Russia appear about as large as in three of the four preceding years; but Russian exports, from what is commonly regarded as a short crop, seem certain to be small as compared with 1930–31 and 1931–32.

Year	Stocks ex-Russia	Crop ex-Russia	Stocks and crops	Russian exports	Total supplies	Disappearance
1927–28 ..	531	3,588	4,119	2	4,121	3,523
1928–29 ..	598	3,925	4,523	0	4,523	3,669
1929–30 ..	854	3,425	4,279	9	4,288	3,478
1930–31 ..	810	3,685	4,495	114	4,609	3,718
1931–32 ..	891	3,629	4,520	65	4,585	3,736
1932–33						
Aug. est.	825	3,680[a]	4,505	35	4,540	.....
Dec. est.	849	3,674	4,523	18	4,541	3,656

[a] Erroneously published as 3,660 in WHEAT STUDIES, September 1932, p. 496.

While total supplies now appear much as they did four months ago,[1] Russia's exports seem likely to be smaller than were then expected. The somewhat reduced world wheat supply of 1932–33 does not imply an international wheat position less easy this year than in the two preceding years. Wheat disappearance in 1930–31 and 1931–32 was greatly increased by the relative advantage in feeding wheat instead of corn or other grain (particularly in the United States), and in 1931–32 by increased use of wheat for both human and animal food in certain European countries where rye was relatively scarce. This year rye and feed grain supplies are more abundant, and the use of wheat to supplement these cereals may be expected to be smaller. With this outlet narrowed, the relation of world supplies to consumptive requirements points to an international wheat statistical position about as easy this year as in 1930–31 and 1931–32; smaller supplies will be offset by smaller disappearance.

The geographical distribution of stocks plus crops between important producing areas is somewhat different from what it appeared to be four months ago, as the figures below (million bushels) indicate:

Year	European importers	Exporters[a]	United States[b]	Canada[c]	Argentina	Australia	Danube, North Africa[d]
1927–28 ..	1,149	2,406	994	533	351	141	387
1928–29 ..	1,205	2,810	1,053	659	444	187	467
1929–30 ..	1,339	2,397	1,058	432	293	154	460
1930–31 ..	1,182	2,724	1,153	548	297	251	475
1931–32 ..	1,202	2,711	1,234	444	300	236	497
1932–33							
Aug. ...	1,320	2,633	1,102	596	302	270	363
Dec. ...	1,380	2,566	1,106	567	291	250	352

[a] Summation of the five following columns.
[b] Including United States grain in Canada.
[c] Including Canadian grain in the United States.
[d] Northern Africa includes Morocco, Tunis, and Algeria.

Crops of European importing countries are now estimated some 60 million bushels larger than preliminary figures used in our previous Survey; and in spite of small inward carryovers these countries appear to have larger initial supplies than even in 1929–30, when imports and consumption were subject to

[1] Our August estimates were stated in terms of ranges, the midpoints of which are given in the preceding and following tabulations.

fewer restraints. Exporting countries appear to have smaller supplies than seemed probable in August, but only in the Danube basin (and Russia) are the supplies relatively small.

The distribution of world supplies is of primary importance for international trade in wheat and probably also for consumption. The record crop harvested by European importers will unquestionably result in a big reduction in international trade. At the same time, several of the countries are in a position to consume more wheat this year than they did in either of the two preceding years when their own crops were smaller. The distribution of supplies among the various exporting countries is of significance mainly from the standpoint of pressure on the international market. The small Danubian and Russian supplies prevented heavy pressure from these two sources during August–November 1932, a situation which favored heavy exports by Canada during these months. The supply position for the remainder of the crop year suggests fairly heavy pressure from the Southern Hemisphere countries, with active competition from Canada and later, if at all, from the United States.

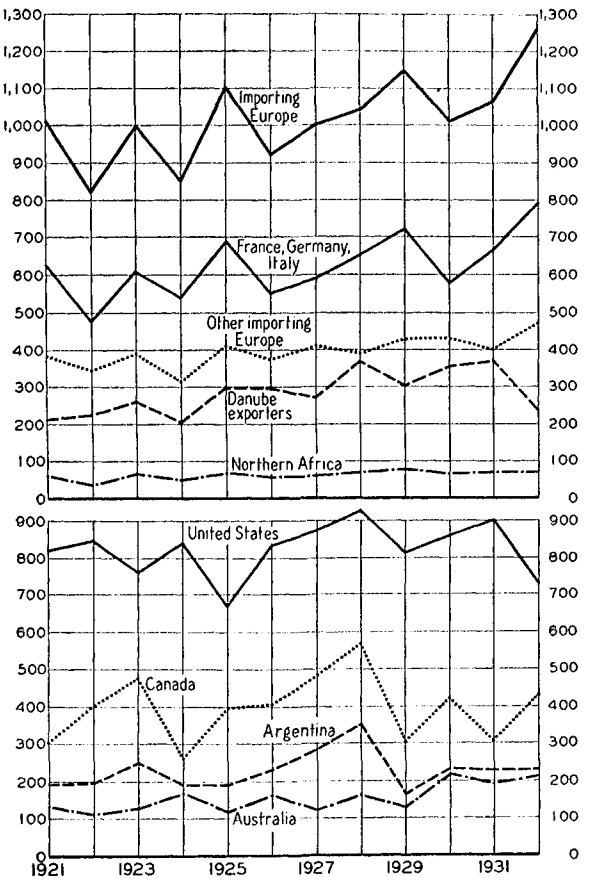
Cereal Crops of 1932

Chart 1 brings into clear relief the outstanding features of the distribution of the world crop of 1932: the record harvest of European importing countries, the relatively poor to mediocre outturns in the major Northern Hemisphere export areas, the moderate-sized crop of Argentina, and the near-record crop of Australia. The contrast with the crop distribution of 1931 is particularly striking (see also Table I). In North America an increase of over 100 million bushels in Canada was more than offset by a decrease of over 170 million in the United States. Reduction in outturn exceeded 125 million bushels in the Danube basin, and was large in Russia. In importing Europe, on the other hand, preliminary crop estimates indicate increases of around 50 million bushels in France and Spain and increases of over 25 million in Germany and Italy. The crops were of record size in Germany, Italy, Spain, Portugal, Greece, Holland, the Scandinavian group, and Czecho-Slovakia.

Australia and Argentina will probably harvest larger crops from larger wheat areas in 1932 than in 1931. The first official estimate of the Argentine crop is 231 million bushels.

Chart 1.—Wheat Production in Principal Producing Areas, 1921–32*

(Million bushels)



* See Table I. Later revisions for Argentine estimates for 1930 and 1931 are given in Table I.

No estimate for Australia has been published, but the outturn there will probably amount to at least 210 million bushels and may exceed the previous record crop of 214 million bushels in 1930. A preliminary estimate suggests that the area harvested in Australia will be about the same size as in 1929—larger than in 1931, but considerably smaller than the record acreage of 1930. In Argentina, the harvested area is expected to be of about average (1927–31) size.

The decline in production in Northern Hemisphere exporting countries between 1931 and 1932 was due partly to reductions in harvested area (sizable reductions occurring in Russia and most of the Danubian countries), but more to unfavorable conditions which resulted in low yields per acre. In Canada and India wheat areas were of record size; but in the United States the total area harvested, though slightly larger than in 1931, was otherwise the smallest since 1925. The United States winter crop was notably small because of reduced sowings and extended drought; but the spring crop, harvested from an acreage above average in size, was slightly larger than average according to the official estimate.[1]

European importing countries quite generally harvested larger wheat areas in 1932 than in 1931; and yields per acre were high. Record areas (preliminary figures) were harvested in Germany, Holland, Czecho-Slovakia, Switzerland, and Scandinavia, and areas below average (1927–31) only in Great Britain and Spain. Yields per acre were generally high. Among the large producers, Italy and Spain secured record yields. Germany and France had secured higher yields only once before in the preceding decade. Of the smaller producers, Finland, Greece, and Portugal had record yields per acre.

All the Danubian exporting countries except Bulgaria secured notably low yields per acre. In Roumania and Hungary the wheat areas were below average (1927–31) in size, chiefly because of adverse planting conditions; in Jugo-Slavia and Bulgaria, they were about average. Growing conditions were generally unfavorable, a severe infestation of rust occurring in the summer months.

[1] The official December estimate of the spring-wheat crop was 265 million bushels, a figure 15–55 million bushels larger than estimates issued in November by several milling and elevator concerns in the Northwest (see the *Modern Miller*, November 26, 1932, p. 17). October 1 estimates of Chicago statisticians averaged 268 million bushels.

[2] See *Foreign Crops and Markets*, October 10, 1932, p. 517, and the *Northwestern Miller*, November 23, 1932, p. 469.

[3] Board of Grain Commissioners for Canada, *Report on the Milling and Baking Characteristics of the Crop of 1932*, Winnipeg, October 18, 1932.

No official estimate of the Russian wheat crop has yet been published; but there can be no question that the crop is too small to permit the Soviet government to push wheat into export this year as was done early in 1930–31 and in 1931–32. A private European estimate (widely circulated in this country) indicates a Russian outturn of 800 million bushels in 1932 and one of 960 million in 1931. This latter figure is almost certainly too high relative to the official figure for the 1930 crop, 989 million bushels. A crop of 800 million bushels from a sown area officially estimated at 88.7 million acres would represent an average yield per acre of only 9 bushels, a yield even lower than that of 1929.

The Chinese wheat crop of 1932 is said to be somewhat smaller than last year's poor crop. In Manchuria the outturn was apparently only about 40 per cent of that of 1931 and the crop near Tientsin 80 per cent.[2] But while the small domestic wheat crop and prevailing low international wheat prices favor heavy imports of wheat into China in 1932–33, a large rice crop and good-sized outturns of other food products in that country (particularly around Shanghai) are factors which may tend to restrain importation.

Except in eastern and central Europe the major wheat crops of 1932 were favored by good to excellent harvesting weather, and turned out to be of good quality. In western Europe, the German and English crops are among the best harvested in recent years; the quality of the French crop is apparently good, and that of the Italian crop fair to fairly good. Wheat in some of the central European countries, including Poland, Austria, and Czecho-Slovakia, suffered from rust infestation, and is accordingly of light weight per bushel. The Danubian crops are practically all low in quality, having been damaged by drought and later by rust.

Canadian wheat has graded unusually high this year; it is of high protein content, and of excellent milling and baking quality.[3] United States winter wheat is moderately high in protein (appreciably higher than last year), but so far has graded a little lower than in either of the two preceding years. United States spring wheat is also of fairly high pro-

tein content, and gradings have been higher this year than last.[1] The quality of the new Southern Hemisphere crops is not yet definitely determined; but trade reports indicate that early marketings of Australian wheat have shown excellent quality, and that the quality of the Argentine crop is expected to be fair to good if harvesting weather is favorable after mid-December.

Not only wheat, but also rye and the feed grains are available in unusually large quantities this year. During post-war years the European rye and feed grain position was easier in only one year. In 1929–30 rye, barley, and oats were all more abundant (partly because of larger crops and partly because of larger inward carryovers), but corn supplies were somewhat smaller. Comparative production data for Europe ex-Russia are shown below in million bushels:[2]

Year	Rye			Corn		Barley	Oats
	Germany	Poland	Others	Danube	Others		
1927	269	232	312	311	174	659	1,748
1928	335	241	328	250	134	743	1,879
1929	321	276	343	522	183	827	2,060
1930	302	274	347	400	211	758	1,705
1931	263	225	290	464	167	692	1,699
1932[a]	320	252	358	529	199	803	1,856

[a] Preliminary and including our rough estimates for countries for which no official estimates are available.

Outside of Europe, 1932 rye and feed grain crops of leading producing countries were not so strikingly large. The North American rye crop of 1932 was only of average (1927–31) size, and Argentina harvested only a moderate-sized corn crop in the spring of 1932, in contrast with her bumper outturn of 1931. In the United States, on the other hand, the corn crop harvested in the fall of 1932 was large as compared with other recent crops, some 340 million bushels larger than that of last year, and not appreciably exceeded since 1923.

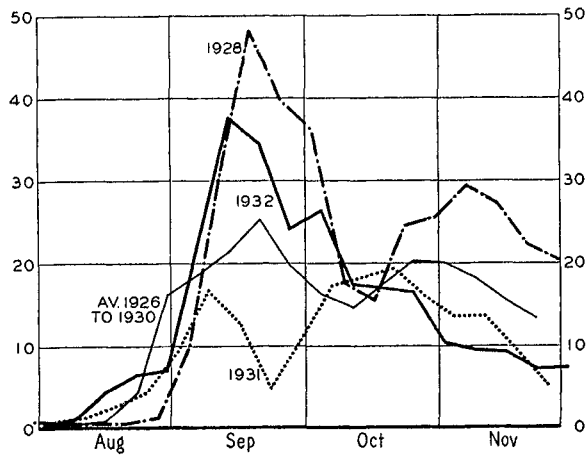
Marketing the New Crops

In Canada and in European importing countries new-crop wheat was marketed in unusually large volume during the early months of 1932–33; but in the United States and in the Danube basin wheat marketings were relatively light.

Canadian country marketings (Chart 2) rose from a relatively low level late in August to a peak in September which was considerably above the average and still farther above

Chart 2.—Canadian Marketings, August–November 1932, with Comparisons*

(Million bushels)



* Deliveries of wheat at country elevators in the Prairie Provinces as of weeks ending Friday, combined with platform loadings as of weeks ending the 7th, 14th, 21st, and last day of each month. Data from *Canadian Grain Statistics*, and *Monthly Review of the Wheat Situation.*

the peak of 1931, though not so high as after the bumper crop of 1928. Because of the different international position, the heavy Canadian marketings of September 1932 were apparently a more important price-depressing factor than the still heavier marketings of September 1928. From the September peak, marketings declined to average and below in October–November 1932, influenced partly by the continued downward drift of wheat prices. During August–November as a whole, total marketings were heavier than in any year of the preceding decade except 1928, when they were considerably larger, and also 1923, when they were about equally large after a larger crop. Since marketings in August–November 1932 represented about an average proportion of the year's crop, it appears that Canadian farmers (with no cash bonus in sight) have not tended to hold their wheat for higher prices.

[1] U.S. Department of Agriculture, *Quarterly Wheat Market Review*, November 22, 1932.

[2] Official data as reported by the U.S. Department of Agriculture and the International Institute of Agriculture.

In the United States, on the other hand, the movement of wheat to market in July–November 1932 was the smallest in ten years. Weekly receipts at fourteen primary markets reached a low peak around mid-July (somewhat earlier than usual), and declined slightly during August–November. The level of receipts was below average throughout the period; but during September–October it was about the same as in 1931. Monthly receipts for several designated years are shown below, in million bushels:

Year	July	Aug.	Sept.	Oct.	Nov.	July–Nov.
1926–30 av.	80	85	62	52	33	312
1930	99	85	63	29	25	301
1931	104	62	39	33	26	264
1932	41	41	38	27	18	165

The light marketings of July–November 1932 reflected the small size of the United States winter crop, as well as holding by farmers who hoped for higher prices or expected to feed wheat later in the year. The percentage of the winter-wheat crop marketed in July was smaller in 1932 than in any year since 1924, and the percentage of the total crop marketed in August–November was smaller than in any since 1923.

Russian and Danubian marketings were also light during the early months of 1932–33, largely because of small wheat crops. Soviet grain collections have been notably smaller than in either of the two preceding years; and, in addition, they have been running farther behind schedule than they did in 1931–32, when the official plan called for the collection of 3.3 million metric tons more grain than it does this year.[1] Data on Russian grain collections expressed as percentages of the monthly plans[2] for July–October 1931 and 1932 are as follows:

Month	All grains 1931	All grains 1932	Wheat 1932
July	114	46	No data
August	97	68	44
September	69	88	65
October	52	46[a]	34[a]

[a] To October 25.

Data on wheat collections are not available for 1931; but those for 1932 clearly indicate that the collection campaign has been less successful for wheat than for other grains. Although the smaller total grain collections of July–November 1932 are attributable mainly to smaller crops, Russian peasants were probably also more reluctant to deliver their grain to the state this year than last. An official decree of May 6, 1932, provided that after the required deliveries of grain were made to the government, collective farms and their members might sell on the open market whatever surplus remained. This provision, which was a departure from the government policy of recent years, perhaps encouraged some peasants to hold back for private sale grain that should have been delivered to the state. Whether a significant amount of grain has been so held depends upon the extent to which the government has been successful in enforcing the rule that no collective farm shall sell grain upon the open market until it has delivered its full quota of grain to the state collecting agencies. Deliveries from state farms, as well as from collective and private farms, fell far below the official plan in August–November 1932.

Less important in its influence upon world wheat prices than marketing in North America and eastern Europe, but an important influence upon domestic wheat prices in western Europe, was heavy marketing of wheat in leading European importing countries. Influenced by good weather, large crops, stringent financial need, and perhaps also fear of falling prices, farmers in Germany and France marketed notably large quantities of wheat in August–November 1932. This led to drastic early-season declines in domestic wheat prices (Chart 7, p. 154, and Table VI), and to resulting complaints and demands for governmental action from the agricultural classes in these countries. The various governmental measures adopted by France and Germany for the purpose of improving domestic wheat prices are discussed on pages 147–49.

[1] See *Foreign Crops and Markets*, May 23, 1932, p. 815, and *Economic Review of the Soviet Union*, June 1, 1932, p. 253.

[2] Data for 1931 from weekly grain letters of J. A. Goldschmidt & Company, October 21 and November 12, 1931; data for 1932 from *Foreign Crops and Markets*, November 21, 1932.

Visible Supplies and Other Stocks

Though world visible supplies of wheat remained at a notably high level during August–November 1932, they were consistently smaller than in the same period of 1931. Moreover, in September these stocks were smaller than in 1930; and in part of October–November they were smaller than in 1929. Data showing the level and course of world visible supplies[1] in August–November 1927–32 are as follows, in million bushels:

Year	Aug. 1	Sept. 1	Oct. 1	Nov. 1	Dec. 1	Increase Aug. 1–Dec. 1
1927 ...	150	160	178	229	291	141
1928 ...	202	194	254	369	419	217
1929 ...	325	368	431	494	481	156
1930 ...	358	384	455	464	485	127
1931 ...	443	475	486	516	528	85
1932 ...	386	374	455	486	481	95

During August world visibles declined instead of increasing as they have in most recent years, mainly on account of an unusually small increase in commercial stocks of United States wheat and unusually large decreases in stocks afloat and in visible positions in Australia. In September, on the other hand, world visible supplies, influenced mainly by heavy Canadian marketings, rose more rapidly than in any of the five preceding years. From October 1 to December 1, and indeed in August–November as a whole, the increase in these stocks was relatively small.

Chart 3 shows the level and course of the two largest components of world visible supplies. In recent years commercial stocks in the United States and Canada have usually represented 75–85 per cent of world visible supplies in August–November; this year they represented larger percentages than in any of the five preceding years, rising from 81 per cent on August 1 to 90 per cent on November 1, and amounting to 87 per cent on December 1.

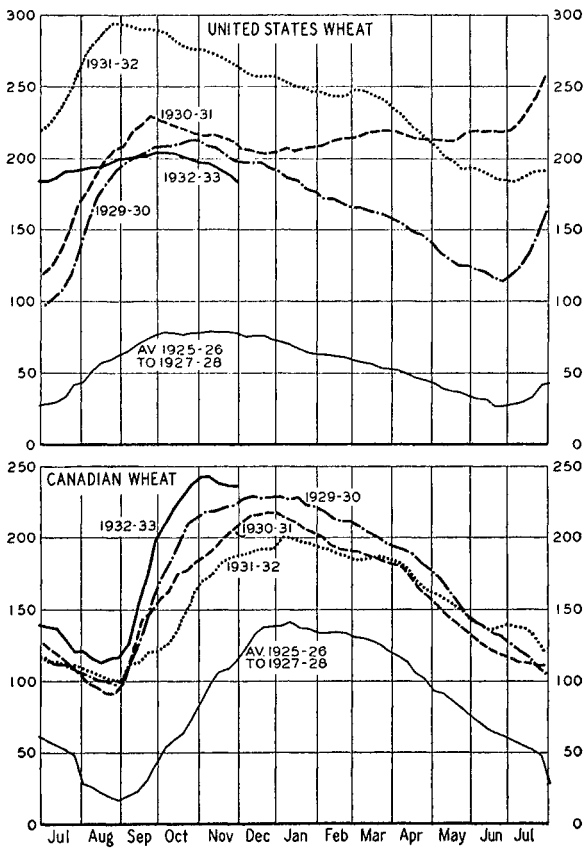
Commercial stocks of United States wheat, including what was in Canada, were consistently much smaller during the first four months of 1932–33 than in 1931–32; and during the latter part of the period were even smaller than in either 1929–30 or 1930–31.

[1] See also Table IV.

The lower level in 1932–33 is attributable to the small 1932 crop, to holding of an unusually large proportion of the crop on farms, and to maintenance of a high level of city mill stocks, which were already of record size on

Chart 3.—North American Visible Supplies, 1932–33, with Comparisons*

(Million bushels)



* Recent data for the series in Table IV.

July 1. As compared with years before 1929–30, the level of United States visibles in 1932–33 has been high mainly because of the large stocks in commercial channels on July 1, 1932.

The increase in United States visible supplies from the low point in August to the insignificant peak of mid-October was less than in any other recent year. In 1925, when a smaller crop was harvested and United States exports were somewhat larger, farmers marketed more freely and visibles reached a higher peak. As compared with years since

1925, the smaller crop of 1932 was also an important factor. Mill buying of wheat was only of moderate volume this year, to judge by mill grindings[1] and the moderate increase in city mill stocks of wheat between July 1 and October 1; and net exports of both wheat and flour were smaller than in the same period of any other post-war year.

Visible supplies of Canadian wheat were of record size throughout August–November 1932 on account of the large carryover and fairly rapid marketing of this year's sizable crop, and in spite of moderately large net exports. The increase during September, when the Canadian marketing movement was at its height, was larger than in any preceding post-war year. But in August, and again in October–November, the course of these stocks was more nearly like the average course. As of about December 1, stocks in country elevators in the Western Division and at Fort William and Port Arthur in particular were very heavy this year, while stocks of Canadian wheat in United States ports were relatively light. December–March exports of wheat from Canada presumably will not be increased materially by reduction in stocks now situated at the head of the lakes; but a fair portion of the stocks in western country elevators may be exported via Vancouver. Farm stocks in Canada at the end of November were probably of moderate size, while mill stocks (to judge by data reported as of October 31) were unusually large.

Outside of North America, visible wheat supplies were generally small during August–November 1932. Stocks afloat, reflecting the light movement of wheat in international trade and particularly from Southern Hemisphere countries (whose shipments are afloat a longer time), were lower during most of August–November than in any of the five preceding years. Indeed, as of September 10 stocks afloat were down to a record post-war low level of 20.9 million bushels. In the United Kingdom, port stocks were not built up as they were in the three preceding years—a factor which will be of great significance for international trade next January–July. On December 1 these stocks amounted to only 8 million bushels, as contrasted with 30 million in 1931, 14 million in 1930, and 21 million in 1929.

Visible supplies in Australia were moderately large early in August, but declined more rapidly than usual to November 1. The increase in November was large; on December 1 these supplies amounted to about 7 million bushels, almost all of which was new-crop wheat. Argentine visibles were of moderate size and showed little change from month to month throughout the period.

II. INTERNATIONAL TRADE

Total Volume and Course

Shipments of wheat and flour in August–November were the smallest in ten years, and only about two-thirds as large as in the same months of each of the two years preceding. Comparisons[2] are shown below, in million bushels:

Aug.–Nov. (17 weeks)	Total	To Europe	To ex-Europe
1927	252.0	220.8	31.2
1928	296.0	240.4	55.6
1929	219.2	172.0	47.2
1930	270.4	228.0	42.4
1931	274.4	212.4	62.0
1932	186.4	143.6	42.8

Two general factors were chiefly responsible for light shipments this year: (1) a reduced European import demand as compared with most years, owing to large domestic crops, strict import and milling regulations, and the prospect of good Southern Hemisphere crops; and (2) less pressure of wheat by exporting countries than in several recent years, notably August–November 1930 and 1931 when Russia shipped large quantities of wheat unsold. Ex-European takings were appreciably smaller than in the same months of 1928 and 1931, but were nevertheless of fair size.

The volume of trade has been small this year not only in contrast with past years, but

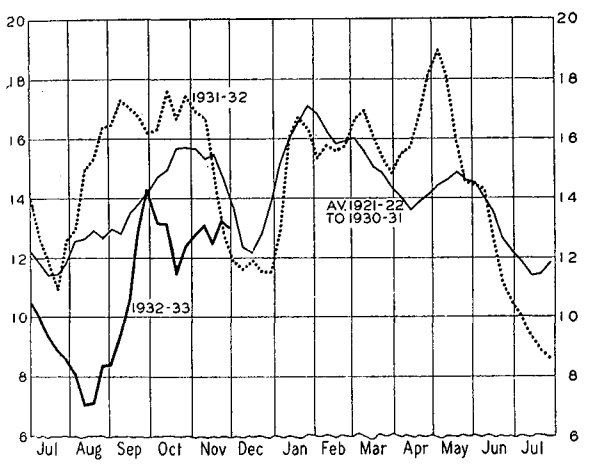
[1] Flour produced minus flour exported in July–October totaled 36.5 million barrels, a quantity smaller than in any of the preceding five years.

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

also in relation to early trade forecasts for 1932–33. In nine of the ten preceding years, August–November shipments comprised not less than 30 per cent of the August – July total.[1] If shipments in August–November this year had equaled 30 per cent of Broomhall's trade forecast for 1932–33 (at 704 million bushels this was near the middle of the range of our August forecast), they would have been 25 million bushels larger than they actually were.

The course of world shipments in August–November 1932 (Chart 4) shows three unusual features: the low point in shipments came in August, rather than in July; the increase in trade during September was notably sharp; and in October, shipments dropped off instead of increasing seasonally.

CHART 4.—WORLD SHIPMENTS OF WHEAT AND FLOUR, 1932–33, WITH COMPARISONS*
(Million bushels; 3-week moving average)



* Data from Broomhall's *Corn Trade News*, and *Corn Trade Year Books*.

The striking decline from the low level of mid-July to the still lower one of mid-August is probably attributable chiefly to increased caution on the part of foreign importers, particularly in western Europe where domestic wheat prices declined under the influence of heavy marketings while prices in leading exporting countries advanced. A sharp increase in trade during September was to be expected if only because July–August shipments were lower than in any preceding post-war year; additional factors were heavy Canadian marketings and declining wheat prices. In October, importers, who had accumulated fair holdings in the previous month and looked forward to securing large supplies of Argentine and Australian wheat at lower prices after January, renewed hand-to-mouth purchasing. In the following month the same practice was prevalent, and stocks of imported wheat remained low.

The course of world shipments in August–November 1932 would not have differed so radically from that of 1931 if Russia and the Danubian countries had had as large a supply of wheat available for export this year as last. In 1931 the course of shipments in August–November reflected the pressure of large quantities of unsold Russian and Danubian wheat upon European import markets, as well as the actual demand of importers.

SOURCES OF EXPORTS

The sources of world shipments in August–November 1932, with comparisons, are shown below[2] in million bushels:

Aug.–Nov. (17 weeks)	North America	Argentina	Australia	Russia	Balkans	Others
1927	195.2	20.8	13.6	4.0	12.0	6.4
1928	220.0	38.4	16.4	0.0	15.6	5.6
1929	106.8	71.6	14.4	0.0	20.4	6.0
1930	143.2	14.4	22.4	62.8	17.2	10.4
1931	119.2	23.6	28.4	61.2	34.4	7.6
1932	118.8	13.2	26.8	12.4	3.2	12.0

Expressed as percentages of total shipments, these figures are as follows:

Aug.–Nov. (17 weeks)	North America	Argentina	Australia	Russia	Balkans	Others
1927	77.4	8.2	5.4	1.6	4.8	2.6
1928	74.3	13.0	5.5	0.0	5.3	1.9
1929	48.7	32.7	6.6	0.0	9.3	2.7
1930	52.9	5.3	8.3	23.2	6.4	3.9
1931	43.4	8.6	10.4	22.3	12.5	2.8
1932	63.7	7.1	14.4	6.7	1.7	6.4

Canada (where most of the North American shipments originated), Australia, and the group of minor exporters designated as "others" each supplied an unusually large

[1] The exceptional year was 1926–27 when the freight rate situation was a complicating factor. High rates to mid-November discouraged trade, while lower rates after mid-November, when the British coal strike was ended, led to increased trade.

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

fraction of the total shipments, while unusually small fractions were furnished by the Danubian countries and the United States. Russian shipments were strikingly smaller, in both absolute and percentage terms, than in the two years immediately preceding, but they were larger than in most earlier post-war years.

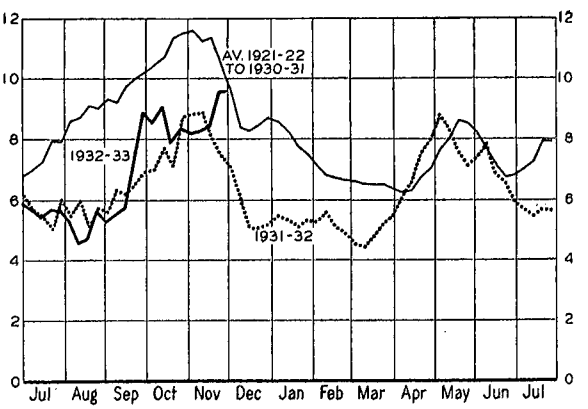
A reduced crop in 1932, and presumably increased difficulties in collections, were responsible for the small Russian shipments this year, which were actually only about as large as in 1923 and 1925, before inauguration of the Five-Year Plan. The very low Danubian shipments, mainly from Hungary, reflect the crop failure of 1932; net exports as usual exceeded shipments (Table IX), but were likewise relatively small. The contribution from other countries was relatively large, mainly because it included shipments from Germany, exceptional in size this year (6 million bushels) on account of the big crop and the revived export certificate system (see p. 147).

North American shipments were of about the same size as in August–November 1931; in both periods they were small as compared with most earlier years. Since United States wheat prices ruled above Canadian prices throughout the period under review, the United States contributed a notably small quantity of wheat to international trade—the smallest quantity, by far, in post-war years, despite large available supplies.[1] Most of these exports were made possible on grounds other than price competition. Some wheat was shipped to Brazil on the contract negotiated with the Stabilization Corporation last year; some was sent in the form of flour to United States possessions and to countries in Central and South America where United States flour has an established market; and some was exported to Greece where it was favored by a much lower tariff than that imposed on wheat from Canada or Australia.[2] United States flour exports did not fall so heavily as exports of wheat grain, reflecting the good will attaching to certain brands of American flour and probably also some sacrifice of price by United States millers anxious to maintain their foreign markets.

Canadian net exports, on the other hand, were moderately large as compared with post-war years other than 1928;[1] and the course of shipments from North America during August–November 1932 (Chart 5) reflected mainly the course of Canadian shipments. Thus, North American shipments rose to a peak in September and early October under the influence of reduced Canadian prices and heavy Canadian marketings; from mid-October to mid-November the shipments were somewhat smaller, probably partly on account of governmental stabilization of prices in Canada from the last of September to October 25, and also an improved outlook for the Southern Hemisphere crops. The striking increase in shipments late in November reflected buying by importers as wheat prices broke to new low levels, particularly in Canada where depreciation in the exchange emphasized the decline recorded in Canadian markets. Although August–November exports of wheat

CHART 5.—NORTH AMERICAN SHIPMENTS, 1932–33, WITH COMPARISONS*

(Million bushels; 3-week moving average)



* See footnote to Chart 4.

[1] August–November net exports from the United States (including shipments to possessions) and Canada have been as follows during recent years, in million bushels:

Year	Canada	United States	Total
1927	112.9	127.0	239.9
1928	189.5	75.5	265.0
1929	69.9	65.2	135.1
1930	119.7	57.2	176.9
1931	82.0	48.2	130.2
1932	119.8	18.6	138.4

[2] See p. 147.

(including flour) from Canada were fairly large, exports of flour alone were the smallest in over a decade. Another notable feature of Canadian trade this year was strikingly heavy wheat exports from Vancouver. A large Alberta crop, favorable transportation facilities, and low ocean freight rates were partly responsible for the record volume.

Moderate shipments of old-crop wheat came from the Southern Hemisphere in August–November 1932. Australia's exports were large, Argentina's small. The relative size of exports from these two countries was somewhat unexpected, suggesting that the Australian crop of 1931 had been officially underestimated and that Argentine supplies had been overestimated (Table X). Forward sales of new-crop Argentine and Australian wheat were apparently of fair size; but there appears to have been no real pressure of these wheats on the international market despite the excellent outlook for Southern Hemisphere crops in October–November.

Changes in Governmental Regulations

Tariff changes recorded during August–November were mostly of limited application. From November 17 a discriminatory tariff of 2*s.* per quarter (about 4 cents per bushel at current exchange) was imposed by Great Britain upon wheat other than that from the British Dominions, which is permitted free entry as before. Canadian wheat shipped via United States ports is admitted free only on condition that it is consigned direct to "named persons in the United Kingdom."[1] Germany has admitted wheat on export certificates either duty-free or at a rate of 5 cents per bushel[2] depending upon issuance of the certificates in August–October or in November–January; on durum the special duty was raised on August 1 to $1.04 per bushel, and limited to an annual contingent equal to 45 per cent of the quantity ground in 1931.[3] Egypt, on September 14, again raised the rates of the sliding scale for wheat and flour by 54 cents and 88 cents respectively;[4] a former regulation, imposing a double duty on wheat and flour of low gluten content, appears to have been abolished. Greece, on August 23, made the minimum rate of 55 cents per bushel applicable to wheat from Argentina and Uruguay (replacing the maximum rate of $6.90) provided such imports are counterbalanced by exports of Greek goods to those countries; it was also reported, late in November, that Canadian wheat was to receive the minimum rate. Czecho-Slovakia raised the supplementary duties on flour each month, the total increase amounting to 24 cents per barrel (from $3.32 to $3.55). Roumania, normally a wheat-exporting country, increased wheat and flour duties by 39 cents per bushel and $1.07 per barrel[5] on September 15. In view of the short crop the government is endeavoring to avoid wheat imports and to force a larger use of corn and other home products.

Several changes in tariffs and import taxes have been reported in South America and the Caribbean region. Chile, faced with domestic shortage, suspended the statistical tax on wheat imports from August 23 to December 15. Peru, on October 10, imposed supplementary duties of 4 cents per bushel on wheat and $1.00 per barrel on wheat flour. Costa Rica recently reduced the consumption tax on flour, while Cuba, on August 1, imposed a consumption tax of 98 cents per barrel. On September 30, Haiti instituted a new sliding scale of duties on wheat and flour, based upon Chicago prices.

Milling and baking regulations were generally maintained or increased. France reduced the allowance of foreign wheat in milling

[1] This principle has applied to other grains receiving imperial preference under the British Import Duties Act of 1932. The ruling in regard to wheat was made on a recent test shipment and is clearly provisional, since it does not cover all points in dispute—for example, the questions of continuous voyage and of consignment by a shipper in Canada to himself in the United Kingdom.

[2] This rate and succeeding tariff rates cited here are converted at the par of exchange.

[3] The former special duty was 73 cents, and the regular duty is $1.62. Germany is also reported to have granted a 19-cent reduction in duty on a special contingent of Hungarian wheat. See page 149.

[4] The new rates are, for wheat, minimum $1.00, maximum $1.62 per bushel; for flour, minimum $3.65, maximum $5.67 per barrel.

[5] The new duties are 65 cents per bushel and $3.20 per barrel, while an additional 7-cent surtax on flour presumably remains in effect.

from 25 per cent to 15 per cent on August 2, to 3 per cent on August 4, and to 1 per cent on December 2; the maximum extraction rate for wheat was reduced to 66 per cent on September 28. In Germany, members of the millers' consortium are still permitted to use 30 per cent of foreign wheat, but, after August 15, only on condition that 27 per cent is imported on export certificates; otherwise the 3 per cent limit is enforced. On October 15, the German requirement of 5 per cent of potato starch to be mixed with wheat flour was changed to 2½ per cent. The Netherlands reduced the allowance of foreign wheat from 77½ to 75 per cent, effective August 8. Belgium imposed a milling quota permitting the use of 90 per cent foreign flour from September 22 to December 31; thereafter the allowance will be 85 per cent. Sweden reduced the milling quota for foreign wheat from 40 per cent to 20 per cent on September 1, to 15 per cent on September 15, and to 10 per cent on October 15. Roumania is reported to have required the mixing of barley and potato flours with wheat flour and to have restricted the manufacture of white flour to 10 per cent of the total output. Bakers there are permitted to use white flour only for buns and pastry.

Direct import prohibitions and restrictions increased in number during August–November. Belgium from September 22 prohibited the importation of soft wheats comparable with Belgian domestic wheat. The Irish Free State ordered the exclusion of British-milled flour from November 22, although certain quantities previously ordered were admitted up to December 1. Denmark discontinued the requirement of import permits for grain and flour from September 1, but the difficulty of obtaining foreign exchange apparently has remained an obstacle to imports from certain countries. In Czecho-Slovakia the government-financed grain syndicate set up at the end of July was given power to control imports, with the object of maintaining domestic prices between $1.21 and $1.41 per bushel.

Bounties on marketing and export of wheat are fewer in 1932–33 than in the preceding year. The British Wheat Act subsidizing domestic production is effective for the 1932 crop, and Hungary has continued the grain-ticket system with a payment of 19 cents per bushel on wheat marketed; but neither Hungary, Roumania, nor Poland pays an export bounty on wheat this year. Hungary, in fact, made wheat exports subject to official permit, and after September 30 no permits were issued. Canada has not renewed her bonus on wheat marketed. Latest advices from Australia indicate that no bonuses will be paid on the new crop, but that cash relief will be distributed to the more needy farmers.

A large measure of direct governmental intervention in domestic wheat markets has been apparent in the first months of 1932–33. In the season of heavy new-crop marketings, when Canadian hedging pressure threatened to depress prices severely, the Dominion government sponsored stabilization purchases of wheat futures.[1] Total holdings are privately surmised to have approximated 125 million bushels in mid-November. The German government also sponsored extensive stabilization purchases, although more rye than wheat was bought. It is possible that similar operations in wheat may be undertaken by the Wheat Office recently established in France. The Latvian government, according to news reports, accumulated funds amounting to nearly $3,000,000 in order to purchase domestic wheat and rye from growers, in accordance with the grain monopoly regulations. The quantity of domestic wheat to be purchased by the Greek government this year was fixed at approximately 2,800,000 bushels. Late in November Broomhall reported that the Bulgarian Grain Purchasing Board had bought only about 20,000 tons of wheat, while last year by November 1 the Board had purchased approximately 400,000 tons of cereals

[1] Premier Bennett discussed these operations before the Canadian House of Commons on November 14, explaining that the decline of speculative buying had made it desirable for the government to step in and buy futures in order to absorb some of the large volume of new-crop hedges and thus to prevent further price declines. He stated the opinion that this action would be of greater benefit to the Dominion as a whole, at less cost, than the payment of a bonus as in the preceding year. For a more detailed discussion of the Canadian government operations, see WHEAT STUDIES, December 1932, IX, 81–82. The provincial pools are urging the restoration of a Dominion wheat board like that operating during the war.

and exported 200,000 tons. The Moroccan government, on September 9, announced that it would support the domestic market.

Outstanding among other price-supporting measures were steps taken by the French, German, and Italian governments to promote holding of wheat by private agencies. By a decree of October 12, the existing French system of subsidized storage by co-operatives was extended to wheat stored by individual farmers on their own premises, through arrangements with the co-operatives of which they are members; since farmers were enabled to secure advances from the government and agricultural credit institutions up to 80 per cent of the current value of their crops, it was expected that about 22 million bushels, the quantity for which subsidies were authorized, would be stored. The value of the premiums is 11 cents per bushel, and the period of storage will extend to September 30, 1933, unless the contracts are canceled earlier by the Minister of Agriculture. The German government also granted subsidies for storage, and provided credit facilities with low interest rates for farmers and others in order to encourage holding. Members of the millers' consortium were ordered by the government to store 230,000 tons of wheat which was to be bought in installments at different times, the last being October 15. The Italian government is reported to have appropriated $20,000,000 to protect domestic wheat prices by supplying funds to agricultural credit institutions for financing farm holding.

Probably the most important international action affecting wheat and flour during this period was the group of inter-Empire agreements announced on August 21 at the conclusion of the British Imperial Conference at Ottawa. In agreements made with Canada and Australia, Great Britain promised to impose a tariff of 2*s.* per quarter on foreign wheat for a period of five years, with the proviso that the tariff might be removed at any time if Empire producers proved unable or unwilling to supply sufficient quantities to the United Kingdom at prices not exceeding world prices. The agreement with Canada also provided that if preferences granted in the agreement appeared likely to be frustrated by underselling of foreign products through State action, steps would be taken to prohibit the entry of such goods; this provision was presumably aimed at Russia, but it may be interpreted to apply to any country in which the government aids exporters to sell abroad at low prices. The free entry of flour from the Dominions was prolonged for five years. These agreements with Canada and Australia have been confirmed on both sides.

A conference of central and eastern European countries held at Warsaw in August discussed possibilities of international action and outlined measures for consideration at a larger European conference which met at Stresa, Italy, early in September. The conferees at Stresa adopted a draft convention providing for contributions by the participating states to a cereals revalorization fund of $14,475,000. (Customs privileges may be granted to cereal-exporting countries in lieu of cash contributions.) The aim is to facilitate annual exports of about 59 million bushels of wheat and varying quotas of other grains from the principal European exporting countries. Recommendations were made for the extension of regional agreements and the progressive removal of exchange restrictions and other trade barriers. Meanwhile negotiations for bilateral trade agreements were continued; as a result of special agreements Hungary undertook to deliver 1,837,000 bushels of wheat to Germany by September 15; 2,572,000 bushels to Switzerland by the end of 1932; and 84,000 barrels of flour to Austria.

Distribution of Imports

Wheat shipments to Europe in August–November 1932 were strikingly small — the smallest in over a decade. Comparisons for six years are shown below in million bushels:

Aug.–Nov. (17 weeks)	Adjusted total[a]	Reported total[b]	Orders	U.K.	Continent
1927.....	209.8	220.8	30.7	60.1	130.0
1928.....	221.6	240.4	27.9	63.6	158.7
1929.....	181.0	172.0	48.7	52.1	71.2
1930.....	221.6	228.0	74.3	45.7	108.3
1931.....	214.6	212.4	76.8	43.7	92.0
1932.....	135.4	143.6	28.6	54.1	60.9

[a] By subtracting from the reported figure the amount by which stocks afloat were increased during August–November, or adding the amount of reduction.

[b] The figures in this column are not the direct sums of the items in the three following columns, which are taken from a different table in Broomhall's *Corn Trade News*.

Actual European takings of wheat (see "adjusted total") were even smaller than Broomhall's reported shipments to Europe, because some eight million bushels of the wheat shipped went to increase stocks afloat. This year's small imports are attributable mainly to the large cereal crops harvested in western Europe last summer, to continued stringent import and milling regulations (including restrictions on the use of foreign exchange), to the unwillingness of importers and millers to hold even moderate stocks of foreign wheat in view of these regulations and of the favorable outlook for Southern Hemisphere crops, and to lack of important sales pressure from any of the exporting countries. This absence of sales pressure is evidenced by the relatively small shipments that went to "orders" this year.

Both the United Kingdom and the Continent took less wheat in August–November 1932 than in the same months of most other recent years. Although direct shipments to the United Kingdom were larger this year than in any of the three preceding, net imports (a better measure of British takings) were smaller; "orders" shipments, a large percentage of which usually goes to British markets, were strikingly smaller than in August–November 1929–31.

Among the Continental importing countries, Germany and Italy (both of which had record wheat crops) reduced their imports most in comparison with past years. During August–October at least, Germany was a net exporter on a small scale; and Italian net imports totaled less than a million bushels. French net imports, on the other hand, were surprisingly well maintained in spite of the bumper wheat crop harvested by that country.

Ex-European wheat takings were of moderate size, though considerably smaller than in August–November 1928 or 1931 chiefly because of greatly reduced shipments to "Central America" (including Venezuela, and the West and East Indies) and to several other countries. The distribution of August–November shipments (Broomhall's data) between groups of ex-European countries during the past six years was as follows, in million bushels:

Aug.–Nov. (17 weeks)	Central America[a]	China and Japan	Brazil	Egypt	India	Others[b]
1927	11.2	6.6	8.5	2.9	0.1	1.9
1928	20.6	12.7	10.0	5.0	4.0	3.3
1929	19.9	11.9	10.2	2.2	1.6	1.6
1930	13.5	16.0	7.6	2.9	1.6	0.8
1931	20.9	24.8	11.9	2.6	...	1.6
1932	11.5	20.5	8.0	1.0	...	1.6

[a] Includes Venezuela, West Indies, Dutch East Indies, etc.
[b] North and South Africa, Chile, Syria, Peru, Palestine, New Zealand.

This year China and Japan took an unusually large proportion of these shipments, though 4 million bushels less than last year. With wheat prices low, the price of silver fairly stable (though also low), and large supplies of wheat available in Australia, China has absorbed unusually large quantities of foreign wheat during recent months. The short wheat crops harvested in Manchuria and northern China last summer also may have increased the import demand. Wheat and flour exporters in Washington and Oregon have felt that Chinese takings would have been larger but for the possibility of another large sale of American wheat on special terms to the Chinese government—an uncertainty not dispelled until mid-November.[1] While more United States wheat might have gone to China if this sale had not been under consideration (since farmers in the Pacific Northwest might have been willing to take less for their wheat), there is little reason to believe that the total quantity of wheat imported into China would have been much larger than it was. Recent reports indicate that stocks of foreign wheat and flour at principal Chinese ports were moderate or small in November and that importers and millers have made extensive purchases of Australian wheat and flour for shipment in January–March. Net imports into Japan (data on which are available only through October) were relatively small rather than large in the period under review, probably partly on account of currency depreciation in that country.

[1] The Reconstruction Finance Corporation, however, has recently set forth the terms on which it would provide a loan to the North Pacific Grain Growers, Inc., for financing a sale of around 6 million bushels. There is much dispute as to the wheat need of China. It is reported that protests have been made to the Nanking government against purchase of wheat, on the ground that it is political rather than for relief.

Low purchasing power, and in some countries increased restrictions on the use of foreign wheat and flour, were apparently the chief factors responsible for the small shipments to Central America, the West and East Indies, etc. Import restrictions had been tightened in Cuba and in several other countries of this group.[1] Brazilian imports in August–November presumably represented mainly stabilization wheat shipped on last year's contract; the total was small partly because wheat and flour stocks on August 1, 1932, were at least fairly large. Egypt needed less foreign wheat than usual this year, since her own crop was of record size; high import duties have doubtless helped to curtail the use of foreign wheat there. India's wheat trade was notably small in August–November, both imports and exports being negligible, as they were throughout 1931–32.

III. WHEAT PRICE MOVEMENTS

Fluctuating within a narrow range at a notably low level, world wheat prices were irregularly firm from mid-July to early September, but weakened markedly during the remainder of the period under review. Speculative support, a major factor in the July-August advance in Chicago, died away as earlier hopes of prompt and significant improvement in business and trade were shaken or dispelled, as political and financial uncertainties increased, and as the bearishness of the international wheat statistical position was emphasized by mounting Canadian stocks, an even smaller European import demand than had been anticipated, and favorable development of Southern Hemisphere crops.

The decline of prices in September–November established new record lows (in terms of gold) in practically all leading futures markets. On November 29 the December future at Winnipeg reached an all-time record low price of 37.2 cents (United States currency); the same future at Chicago set a new low of 41.9 cents; and at Liverpool the March future fell to 47.0 cents, the lowest price ever recorded for any Liverpool future. The lowest price in the Buenos Aires futures market during July–November was 38.0 cents for the February future on November 24; this was approximately the same as the record low price touched by the October future on September 30 last year. Since December 1 (up to December 17) still lower record prices have been reached in Winnipeg (34.5 cents), Liverpool (43.9 cents),[2] and Buenos Aires (37.2 cents); Chicago prices have been relatively firm.

During July–November price spreads between futures at Liverpool and futures in leading export markets widened substantially. At no time, however, were Chicago prices at an export basis; prices in that market responded more sharply than in the others to early indications of business and financial improvement and to news of unsatisfactory crop conditions in the American Southwest.

The Course of Prices

After an irregular advance in wheat futures prices from mid-July to August 8–10 (p. 152, Chart 6), and a subsequent sag to August 20, there was a general recovery in wheat futures markets to September 6, followed by an extended and irregular decline which culminated in new low gold prices of wheat in most markets at the end of November.

The upward movement of wheat futures prices from mid-July to August 8–10 was primarily of speculative origin. Optimism seemed to displace pessimism in leading wheat markets, particularly in the United States. Prices of industrial stocks rose, partly reflecting relief over the Lausanne agreement of July 9 and over the adjournment of the United States Congress on July 16 after passage of legislation less disturbing to the large business and financial interests than many had feared. Weekly statistical measures of business and

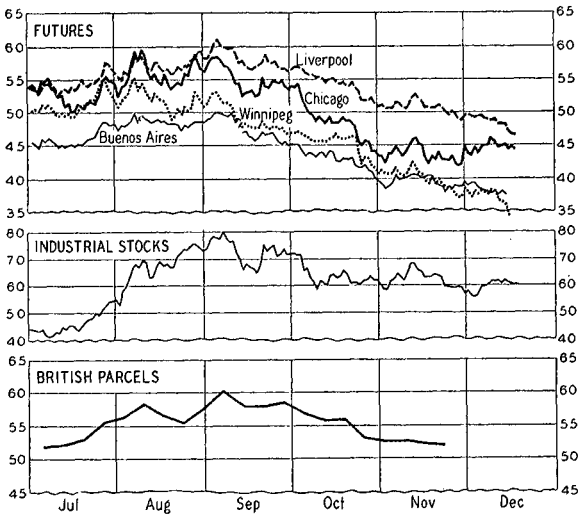
[1] See p. 147.

[2] The Liverpool December reached a low of 46.5 cents on the same day. This is within one cent of the lowest price which, in mid-August, we thought likely to be recorded for the December future on the basis of the wheat situation alone. The price decline of August–December presumably would not have been as great as it was had Canadian and sterling exchange not weakened considerably.

trade activity showed greater stability; advances were registered in the prices of several important commodities, notably sugar and hogs. Rumors in the United States that an Eastern pool (or pools) were to be or had been formed with a view to raising commodity prices were also influential, though it now

CHART 6.—PRICES OF WHEAT FUTURES, NEW YORK STOCKS, AND BRITISH WHEAT PARCELS, JULY–DECEMBER 1932*

(Cents per bushel; dollars per share)



* Daily closing prices of wheat futures mainly from *Daily Trade Bulletin*, Chicago; *Grain Trade News*, Winnipeg; and *London Grain, Seed and Oil Reporter*. December futures in Chicago, Liverpool, and Winnipeg; August, October, and February futures successively in Buenos Aires. Weekly British parcels prices from Table V. Dow-Jones index of closing prices of thirty industrial stocks in New York City.

appears that there was little basis for such rumors. Finally, developments within the wheat situation itself were more bullish than bearish. Complaints of crop deterioration owing to hot dry weather came from the North American spring-wheat belt; United States farmers appeared to be holding much of their wheat, and Russian and Black Sea shipments remained very small. The dip in wheat futures prices which interrupted the general advance during July 28–August 2 reflected mainly disappointment over the bearishness of private estimates of the North American spring-wheat crop.

For ten days following August 10 wheat prices drifted downward, except at Buenos Aires where the preceding advance had been small. North American wheat markets, particularly Chicago, weakened as the advance in industrial stocks prices was significantly interrupted for the first time since mid-July. Moreover, the official estimate of the United States winter-wheat crop (published August 10) was higher than expected, and the poor export demand for North American wheat attracted more attention, particularly as wheat marketings increased in Canada. This combination of market influences led to liquidation of the holdings of some speculators who had taken a long position during the preceding advance.

But with renewed activity and rising prices in stock and cotton markets, and with the circulation of optimistic statements by President Hoover and several prominent officials to the effect that business had touched bottom in July and was showing improvement, many traders again seem to have made speculative purchases of wheat, particularly at Chicago. Wheat futures prices responded to the increased demand by rising irregularly to September 6. The largest advances recorded were at Chicago and Liverpool, prices at Liverpool being over two cents higher on September 6 than at the peak of the preceding advance on August 10. In Chicago, however, the September peak was lower (by about one cent) than the double peak of August 8–10, despite the announcement on September 6 that stocks of stabilization wheat would be withheld from the market until after January 1, 1933. The Winnipeg advance was small and very irregular, with increasing Canadian marketings an important factor. The net advance in wheat prices, even at Chicago, from mid-July to early September was considerably smaller in percentage terms than the price increases recorded for several other important commodities and for industrial stocks.

During the extended decline in prices from September 6 to November 29, wheat futures in Liverpool, Winnipeg, and Chicago established a succession of new record low prices (in terms of gold). The decline reflected developments both in the general business and financial situation and in the world wheat situation.

Prominent among the various business and financial factors (and, indeed, reflecting most of the others) was the daily movement of stocks prices in New York. The similarity of movement during September and early October, and again in November, between Chicago wheat futures prices and industrial stocks prices is striking (Chart 6). The fluctuations in industrial stocks prices in September–November reflected current changes in business sentiment, based partly upon existing conditions and partly upon the political and financial outlook. In the United States, where a national election was scheduled for November 8, the political situation was full of uncertainties. The international financial situation was also disturbing, partly because of uncertainties surrounding the prospects for foreign debt payments due the United States on December 15.

Late in October wheat futures prices in Chicago and other markets declined markedly, while stocks prices remained firm. Weakness in sterling and Canadian exchange and withdrawal of government support from wheat futures at Winnipeg were the major factors responsible for the drop of wheat prices at this time. Depreciation of Canadian exchange continued throughout November, and sterling exchange declined to a new low of $3.15 on November 29; both of these circumstances contributed to weakness in the wheat market.

Within the wheat situation itself, the developments were mainly bearish. European importing countries continued to buy foreign wheat on a restricted scale. Canadian marketings were notably heavy, particularly in September, and Canadian visibles rose to new record heights. Increasing assurance during October–November that the Southern Hemisphere crops would turn out to be large resulted in increased pressure of Argentine and Australian offers on the international market and emphasized the bearishness of the world wheat statistical position. Not until the end of November was it evident that earlier high forecasts of the Argentine crop would have to be reduced.

As wheat prices in the leading futures markets declined to new lows, various governments sought means to check the decline. In Canada, the heavy hedging pressure at Winnipeg in September influenced Premier Bennett again to lend government financial support to the futures market through the selling agency of Canadian Co-operative Wheat Producers, Ltd.[1] This support was maintained intermittently to October 25, when it was suddenly withdrawn and Winnipeg prices dropped sharply. Market reports did not mention renewed support of prices by the Canadian government until late in November. No stabilization purchases were made in the United States; but here too attention was given to possible means of raising wheat prices. The Reconstruction Finance Corporation considered the advisability of financing for the Farmers National Grain Corporation the sale of around 15 million bushels of wheat to China on long-term credit. But terms acceptable to the Corporation could not be devised, and the project was apparently rejected around the middle of November. Secretary of Agriculture Hyde made another attempt to aid the markets, as Secretary Jardine had once done, by announcing that after October 24 individual grain traders would be freed indefinitely from the requirement of stating their long and short positions in the market. In Argentina, the Minister of Agriculture suggested late in October that representatives of the principal wheat-exporting countries should again confer with a view to concerted action in limiting their wheat acreage.

At Chicago and Winnipeg the declines in wheat futures prices (in terms of gold) from September 6 to November 29 were greater than at Liverpool or Buenos Aires. These declines amounted respectively to 16, 16, 12, and 11 cents. The preceding advance in wheat prices had brought more speculative buyers to United States than to other markets, despite the fact that wheat prices in the United States were already above export parity. On the break in prices early in September some of this wheat, particularly that owned by eastern interests, was liquidated; but with recovery in stocks prices later in the month, Chicago wheat prices firmed, and there were signs of renewal of speculative buying. The open inter-

[1] See above, p. 148.

est in Chicago futures increased at this time, probably reflecting mainly speculative buying and spread sales of Chicago wheat against purchases at Winnipeg and Liverpool. But as optimism faded again, and Chicago wheat prices declined precipitously early in October, later drifting farther downward, there was considerable back-spreading and long liquidation, particularly of the December future.

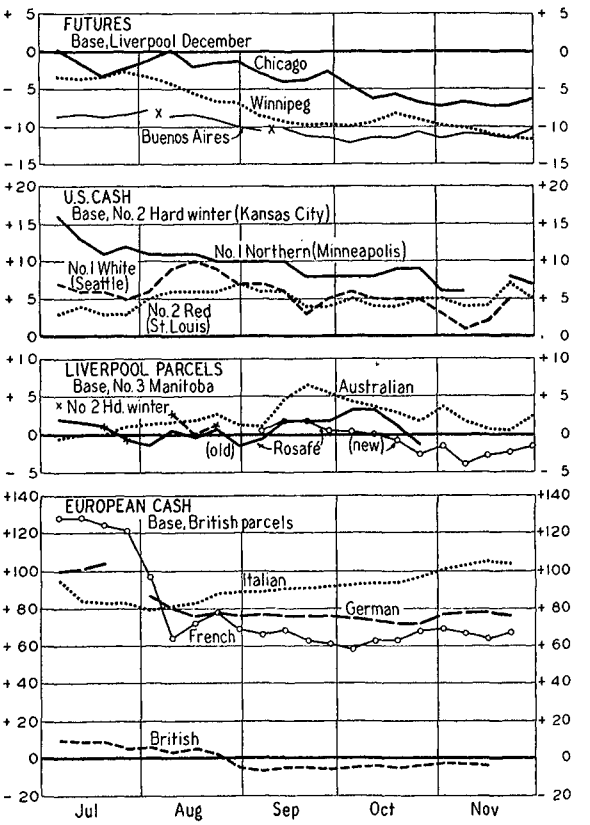
On the whole, however, lack of market support rather than liquidation or short-selling appears to have been the major factor in the Chicago price decline of October–November. Market reports in these months stressed the fact that most wheat traders at Chicago were unwilling to take a definite market position, either long or short. Faced with a bearish wheat statistical position and numerous political and financial uncertainties, they were naturally reluctant to buy wheat as a long-term speculation. On the other hand, the near-record or record low wheat prices already prevailing, the concentration of export supplies (at least for August–December) in North America, the rumored and finally confirmed support of Winnipeg wheat futures by the Canadian government, and the evidence of some little improvement since July in business conditions in the United States, discouraged traders from adopting a short position. During October–November the total open interest declined substantially, but still remained fairly high in relation to the volume of trading. This suggests that (1) traders who had adopted a long position in the market prior to October 1 were maintaining their position, or that (2) as these traders liquidated, other (and presumably smaller) traders came into the market to absorb their offerings. In the first case scalping and in-and-out trading would together account for most of the total volume of trading, while in the second case a large part of the total volume of trading would reflect liquidation by longs and speculative buying by those willing to adopt a long position. The market reports mentioned above clearly suggest that the first conclusion is more nearly correct; but since these reports are based primarily on knowledge of the action of large traders, the second interpretation cannot be excluded as definitely invalid.

Changes in Price Relationships

The outstanding change in price relationships among the leading futures markets in July–November was the widening of spreads between exporting markets and Liverpool (Chart 7, top tier). From mid-July to mid-August the Liverpool-Chicago spread narrowed as Chicago prices responded more actively than those in other markets to the upward movement of New York stocks prices

Chart 7.—Significant Price Spreads, July–November 1932*

(Cents per bushel)



* Futures prices described in footnote to Chart 6. Data on United States cash, Liverpool parcels, and British parcels prices from Tables V and VI; continental European domestic prices (German at Berlin, Italian at Milan, French at Paris) from *Foreign Crops and Markets;* British domestic prices from the *Economist* (London).

and to rumors of actual and prospective business and financial improvement. But after mid-August this spread (December futures) gradually widened to an average of around 7 cents in November, reflecting reaction in

Chicago from the previous advance and the conviction of traders that United States wheat prices would have to decline to an export basis, a basis not reached during the period under review. If farmers in the United States had held their wheat less firmly, and if prospects for the growing winter-wheat crop had been favorable rather than the reverse, Chicago prices might have gone low enough to permit free export of United States wheat.

The Liverpool-Winnipeg futures spread widened fairly steadily from August 1 to December 1, under the influence of large prospective supplies and, later, heavy Canadian marketings. With governmental support of futures prices in September–October, Winnipeg temporarily gained on Liverpool; but with the discontinuance of that support Winnipeg showed relative weakness.

The Liverpool–Buenos Aires spread widened less than did the spreads previously discussed. Until mid-August this spread remained practically unchanged, with Buenos Aires prices too high to permit free exportation of wheat to Europe. From mid-August to the end of September an appreciable widening occurred, but during the two ensuing months the relationship between the Liverpool December future and the Buenos Aires February future remained fairly constant.

Price relationships between futures at Chicago and Winnipeg were unusual, with Chicago prices ruling higher despite a large exportable surplus of wheat in the hands of private traders in the United States and a preference (approximately four United States cents a bushel at current exchange rates) on Canadian wheat imported into the United Kingdom after November 17. The heavy country marketings of Canadian wheat as contrasted with restricted marketings of wheat in this country were doubtless a factor, as was also the greater optimism of United States farmers and traders regarding the wheat-price outlook. Buenos Aires futures too were higher than usual relative to prices at Winnipeg, probably mainly because stocks of old-crop Argentine wheat were relatively small, the size and quality of the new crop were still undetermined, and the Argentine exchange was based upon dollars rather than sterling. The relatively greater decline of Winnipeg futures than of Chicago or Buenos Aires futures in November was due partly to depreciation of the Canadian exchange and to record Canadian visibles: this decline occurred in spite of the imposition in mid-November of preferential duties on wheat imported into the United Kingdom, a factor which in and of itself would tend to raise the price of Canadian relative to non-Empire wheats.

Distant futures ruled consistently above near futures at Chicago and Winnipeg (except for relative strength of the Winnipeg November in the delivery month), a relationship to be expected when wheat stocks are large. At Liverpool the spreads between near and distant futures were generally narrow, with stocks in the United Kingdom small. In August–September the Liverpool March future (old-contract) sold slightly above the December and October futures (the latter future selling sometimes above, sometimes below the December); but in October when traders became more certain that Southern Hemisphere crops would be large, the March future went to a discount under nearer futures, and in November it fell to a still greater discount. The new-contract March sold around 2 cents above the old-contract.

Cash prices at Chicago were firm, but not unusually high, relative to futures prices. Spreads among the various kinds of cash wheat at Chicago, like spreads among cash wheats in different United States markets (Chart 7, second tier), were relatively narrow as compared with other recent years. No 2 Red at St. Louis was lower relative to No. 2 Hard at Kansas City and to No. 1 Northern at Minneapolis than it has frequently been, while the premium of No. 1 Northern over No. 2 Hard was of about average seasonal size. These relationships reflect in part the relatively larger proportion of the winter crop represented by soft red wheat, and probably relatively firmer holding of wheat than usual in the Northwest.

On the British import market American and Russian wheats were not sold in large enough quantities to be quoted regularly; but price spreads among Argentine, Australian, and Canadian wheats were fairly narrow

(Chart 7, third tier). During September and early October, at the height of the Canadian marketing movement, No. 3 Manitoba wheat was several cents cheaper than either Rosafé or Australian. But during the latter part of October Rosafé declined relatively, perhaps partly in anticipation of the British wheat tariff to go into effect in November. During November no old-crop Rosafé parcels were quoted.

The bottom tier of Chart 7 shows French, German, and Italian domestic wheat prices in terms of spreads over British parcels. As in the two years preceding, these spreads were notably wide, being kept so by high tariffs and stringent milling and foreign exchange regulations. The most striking feature of these relationships during the period under review was the sharp decline in French and German prices in July–August, as marketings of new-crop wheat became heavy. The price spread between French domestic wheat and British parcels was reduced by approximately 50 per cent at this time, while the spread between German wheat and British parcels was reduced by almost 25 per cent. These declines brought forth bitter complaints from French and German agriculturists, and led to further governmental action to support prices.[1] The relative firmness of Italian wheat prices in July–November is really more surprising, in view of the high official estimate of the Italian crop, than the decline of French and German prices. Marketings of Italian wheat have not been notably heavy this year, and the Italian wheat crop may have been overestimated.

IV. THE OUTLOOK IN MID-DECEMBER

Trade and price developments during the remainder of the crop year 1932–33, and the size and distribution of the world wheat carryover next August, will depend in large measure upon the changing outlook for 1933 crops, general business and financial developments, and changes in governmental policies and regulations affecting wheat, as well as upon factors about which available information is more nearly complete, such as the size and distribution of 1932 cereal crops, and the size and distribution of world wheat stocks at the beginning of the crop year. Certain definite assumptions regarding these factors underlie our analysis of the outlook: the assumptions (one or more of which will presumably prove to be incorrect) are stated below.

We first assume that standing crop estimates for important areas will not be materially altered, and that our estimate of the size and distribution of world stocks on August 1, 1932, is approximately correct.

Second, we assume that crop developments in January–July 1933 will not be sensationally favorable or unfavorable. It is true that at present the outlook for several of the large winter-wheat crops of 1933 is far from good. In the United States, drought in the Southwest and the prevailing low level of world wheat prices have resulted in a slight reduction[2] in sowings from the already small sowings of last year. Condition is low, probably the lowest in recent years. Drought in Russia and in some of the Danube exporting countries has had similar effects, and the situation in these countries is worse because of a scarcity of good seed wheat. India and northern Africa, too, have been threatened with drought; and in these areas good rains during the next few months are essential. In western and central Europe planting conditions have been more favorable, and wheat acreage will probably be maintained at a high figure; but experience and statistical probabilities are against the recurrence in 1933 of such bumper yields of winter wheat as European importing countries secured in 1932. Yet despite the somewhat unfavorable immediate outlook for winter wheat in several important areas, we find no basis for assuming that crop developments in January–July 1933 (particularly March–July) will be either sensationally good or sen-

[1] See pp. 147–49. The complaints illustrate how quickly growers come to regard artificially high prices as normal.

[2] The official December 20 estimate of winter-wheat sowings showed a reduction of only 1.3 per cent. This was a substantially smaller reduction than had been shown by the private estimates which were issued around December 1.

sationally bad. Normal weather in the next six months would go far to improve the present outlook for Northern Hemisphere winter wheat. No one is in a position to predict the acreage or the yield per acre of Northern Hemisphere spring wheat, or of Southern Hemisphere wheat.

Third, we assume that European import restrictions will be relaxed in coming months, but less than in 1931–32 or 1930–31; that carryovers on August 1, 1933, will be enlarged in Germany, France, and Italy; and that government-sponsored purchases of wheat futures in Canada will tend to enlarge the Canadian outward carryover. Changes in European governmental regulations relating to wheat trade, storage, or milling will depend partly upon crop and financial developments and partly upon the rate at which the domestic crops of 1932 are consumed. These regulations are already notably severe, and in some countries will have to be relaxed; and relaxation of milling quota restrictions during the later months of each of the three preceding crop years establishes a precedent. But because domestic wheat crops in European importing countries were strikingly large in 1932 restrictions are unlikely to be relaxed as much in January–July 1933 as in the same period of the two preceding years. Governmental provisions for the storage of part of the 1932 crops of France, Germany, and Italy will presumably result in enlarged carryovers in these countries on August 1, 1933. The wheat futures nominally owned by Canadian Co-operative Wheat Producers, Ltd., perhaps around 125 million bushels in mid-November, seem likely not to be pushed for sale at the existing low level of prices, but rather to tend to enlarge or maintain the carryover.

Finally, we assume that neither set-backs nor improvements in financial and business conditions will be startling, either at home or abroad. It is impossible to foresee at present what changes will occur in international financial and general business conditions during the next eight months. It is conceivable either that the international financial structure may suffer devastating blows in January–July, or that the structure may benefit greatly from constructive action by various governments and from improvement in general business conditions. Further discussion in the United States Congress of the war debt question may be a somewhat disturbing factor; but we doubt that it will result in any striking changes in the world financial or business situation in the next few months.

International Trade

The volume of international trade in August–July 1931–32 now seems likely to approximate 645 million bushels in terms of shipments, and 665 million in terms of net exports. These forecasts are mid-points of ranges. They are 55 million bushels lower than our August forecasts. Reductions rest mainly on upward revisions in European crop estimates during August–November, in part on the volume of trade in that period.

In mid-August our estimate of the aggregate wheat crop of European importing countries was 1,200 million bushels; our present estimate is 1,263 million. This increase suggests that shipments to Europe in 1932–33 will be considerably smaller than seemed probable in August, say 465 instead of 520 million bushels as the middle of a range. Data on August–November shipments point to the same conclusion. The following tabulation shows the relationships which have existed in recent years between August–November and August–July shipments, both in total and to Europe, as compared with the relationships indicated by forecasts for this year, in million bushels:

Year	Total shipments			Shipments to Europe		
	Aug.–July (52 weeks)	Aug.–Nov. (17 weeks)	% in Aug.–Nov.	Aug.–July (52 weeks)	Aug.–Nov. (17 weeks)	% in Aug.–Nov.
1923–32 av.	761	249	32.7	612	206	33.7
1927–28	793	252	31.8	662	221	33.4
1928–29	916	296	32.3	693	240	34.7
1929–30	613	219	35.8	483	172	35.6
1930–31	787	270	34.4	608	228	37.5
1931–32	770	274	35.7	582	212	36.5
1932–33	...	186	...	...	144	...
Forecasts:						
Broomhall, Dec.	704	...	26.5	504	...	28.5
F.R.I., Aug.	700	...	26.6	520	...	27.6
F.R.I., Dec.	645	...	28.9	465	...	30.9

If our present forecast proves correct, shipments in December–July will represent a

somewhat larger fraction of the year's trade than usual, though not so large a fraction as is indicated by Broomhall's standing forecast. A factor tending strongly in this direction is the low level of port stocks in European importing countries this year as compared with the last few years. There are also prospects for some importation of wheat by Roumania and Jugo-Slavia in the spring. Moreover, as contrasted with 1927–28 and 1928–29, severe restrictions on milling and foreign exchange were in force in August–November this year; and European consumption of foreign wheat may be expected to increase more in percentage terms during the last two-thirds of 1932–33, because of anticipated relaxation in these restrictions.

Trade forecasts of the International Institute of Agriculture (*Crop Report,* October 1932) are lower than, though not directly comparable with, either Broomhall's forecasts or ours. The International Institute has forecast total net exports in 1932–33 at 630 million bushels, of which European countries are expected to import (net) 440 million bushels.

If shipments to Europe (which we tentatively assume will be 5–10 million bushels higher than European net imports this year[1]) do not exceed our forecast of 465 million bushels, they will rank as the smallest in post-war years; the standing low record (1929–30) is 483 million bushels. This appears fairly in prospect on account of larger domestic wheat crops in Europe, worsened financial and business conditions, and more stringent governmental restrictions upon the importation and milling of wheat. On the other hand, European stocks were too low on August 1, 1932, to be appreciably reduced this year as they were in 1929–30, and available supplies of rye and feed grains are a little smaller.

Of the 465 million bushels of wheat which will probably go to European countries in 1932–33, Roumania and Jugo-Slavia will probably take 10–15 million bushels, and stocks afloat will probably be increased by 5–10 million. Practically all European importing countries may be expected to import less wheat this year than last, with the largest reductions occurring in France, Great Britain, Germany, and perhaps Scandinavia. Spain is likely to be a net exporter instead of a net importer this year; but Poland may rejoin the ranks of net importers.

Ex-European takings will probably be somewhat smaller this year than in 1931–32 because of smaller shipments to Brazil, Egypt, and sundry countries. Domestic wheat supplies are larger this year in Egypt and a couple of the smaller importing countries; import restrictions are somewhat more stringent in several; and Brazil's takings presumably will not be enlarged as much as they were last year by imports of stabilization wheat.[2] Though August–November shipments to Central America and the East and West Indies were notably smaller in 1932 than in 1931, the total for the year may not be radically reduced. Purchasing power in these countries is low, and import and milling restrictions are in force in some; but, with the exception of tighter restrictions in Cuba, Haiti, and Peru, these conditions are little changed from last year.

Our forecast of shipments to ex-European countries in 1932–33 compares, in million bushels, with shipments in previous years as follows:

Year	Aug.–July (52 weeks)	Aug.–Nov. (17 weeks)	Percentage in Aug.–Nov.
1923–32 av.	149	43	28.9
1927–28	131	31	23.8
1928–29	223	56	25.1
1929–30	129	47	36.5
1930–31	179	42	23.7
1931–32	188	62	33.0
1932–33	...	43	....
Forecasts:			
Broomhall	200	..	21.4
F.R.I.	180	..	23.8

Total shipments of 645 million bushels in 1932–33 suggest net exports of around 665 million bushels.[3] These may be supplied by

[1] No definite relationship appears to have obtained between European net exports and "adjusted" European shipments during the past decade. In some years net exports have been higher than "adjusted" shipments, in other years the "adjusted" shipments have been higher. We have accordingly assumed that the two will be equal this year, and that stocks afloat will be increased by 5–10 million bushels.

[2] The Brazilian embargo on flour imports expires March 1, 1933.

[3] The average excess of net exports over shipments during the past decade was over 30 million bushels. The excess this year will probably be appreciably smaller.

the various exporting countries as follows, in million bushels:

United States	50
Canada	285
Argentina	120
Australia	160
Russia	18
Hungary and Bulgaria	15
Others	17

This distribution is based upon standing crop estimates and will be affected by revisions in those estimates. We assume that Argentina and Australia will ship freely, that Canada will be their major competitor in world markets, and that the United States will meet the competition only if crop prospects in this country appear notably favorable next spring or summer.

Consumption and Stocks

The forecasts of trade, particularly of European import requirements, given above rest partly upon our rough estimates of probable consumption and end-year stocks in various countries and areas.

European importing countries as a group will probably consume less wheat this year than in 1931–32 or 1928–29 because of larger supplies of rye and feed grains (supplies only slightly larger, however, than in 1928–29), and more stringent governmental restrictions even than those in force last year. Total disappearance of wheat in these countries may approximate 1,665 million bushels as compared with 1,687 million in 1931–32, 1,658 million in 1930–31, and 1,664 million in 1929–30. In the Danube basin, wheat consumption will probably fall notably below the level of the last few years, and rank as the smallest since 1927–28.

Wheat disappearance in the United States promises to be much smaller in 1932–33 than in either of the two preceding years, mainly on account of reduction in the use of wheat for feed. Since feed grains are abundant and cheap this year, not over 100 million bushels of wheat are likely to be fed on farms,[1] as contrasted with 159 and 184 million bushels in 1930–31 and 1931–32 respectively. Even 100 million bushels is a high figure as compared with most earlier years; but it does not appear too high an estimate for 1932–33 in view of the prevailing low level of wheat prices. Wheat used for human food in the United States will probably be slightly larger this year than last, owing to the probability of a slightly lower extraction rate for wheat milled in 1932–33, and to an increasing population. More flour will probably be distributed by the Red Cross this year; but this is not likely to increase consumption significantly.

Domestic use of wheat for food and seed in Canada, Argentina, or Australia has not varied much in recent years (Table X). Since disappearance of wheat in other channels in Argentina and Australia is small, total consumption of wheat in these countries is likely to be about the same this year as last. In Canada, on the other hand, the Dominion Bureau of Statistics has estimated that consumption will be relatively high in 1932–33, presumably on account of an increased quantity of wheat which is unmerchantable, lost in cleaning, or fed to livestock.

Our forecast of world wheat disappearance (exclusive of domestic use in Russia and crops in China, Turkey, and a few countries producing very small amounts) is 3,656 million bushels for 1932–33, a figure around 80 million bushels less than that of 1931–32. Comparisons are given above, p. 138.

World stocks of wheat will presumably be larger at the end of 1932–33 than they were at the beginning. Our estimates of probable stocks in different regions on or about August 1, 1933, are as follows in million bushels:

Region	1932	1933
United States[a]	363	370
United States grain in Canada[a]	16	5
Canada	131	150
Canadian grain in United States	5	3
Argentina	60	80
Australia	40	40
Danube basin	41	18
Importing Europe	120	160
Afloat to Europe	31	38
Others[b]	42	21
Total	849	885

[a] As of July 1.
[b] India and northern Africa.

[1] Nat C. Murray's estimate (see circular of Clement, Curtis & Company, Chicago, December 6, 1932) is 88 million bushels as determined by reports of correspondents; similar estimates have usually fallen below the official figures. Murray regards 88 million as too high.

In western Europe, huge domestic crops and/or governmental aid in storing wheat will tend to increase carryovers, particularly in France, Germany, Spain, and Portugal. On the other hand, wheat stocks in all the Danubian exporting countries and in Poland will probably be reduced, while stocks in Austria, Czecho-Slovakia, and the Baltic states are maintained close to a minimum.

In North America, the carryover of United States grain seems unlikely to be materially smaller than last year, and may approach 400 million bushels unless the present crop estimate[1] proves too high or our estimate of feed use too low. The Canadian carryover bids fair to reach a new high record at the end of the present crop year. Notably large initial supplies of wheat, a small European import demand, heavy Argentine and Australian exports, and firm holding by farmers and private traders in the United States, and by the government in Canada, are the major factors which may be expected to bring about this result. Farm stocks in the United States will almost certainly be very large next June, unless the quantity of wheat fed exceeds our present estimate. Stocks of United States wheat in Canada (which consisted mainly of stabilization wheat on July 1, 1932) will presumably be smaller than in either of the two preceding years.

PRICES

The following brief observations on the price outlook apply only to the next few months, up to the end of March. The price outlook for April–July, when unpredictable new-crop developments will be of dominant importance, is not amenable to well-founded appraisal as early as mid-December.

1. A sustained advance in the Liverpool May future of as much as 15 cents from the close of 47 cents on December 19 is not probable; and even a temporary advance of this magnitude is unlikely. Available world wheat supplies are very large. Prospective import requirements for January–March, with allowance for seasonal relaxation of restrictions, are exceedingly small in relation to total export surpluses; they are moderately small in relation to export surpluses outside of the United States. The pressure of Southern Hemisphere exports remains to be encountered. There is no trustworthy indication that stock-carriers will soon receive substantial encouragement from improvement in general business or in the international financial situation. New-crop prospects cannot be expected significantly to stimulate holding by farmers or speculators in January–March, for these are months in which crop progress is difficult to appraise.

A rather sharp stimulus to demand for wheat seems necessary to give rise to a sustained advance of as much as or more than 15 cents at Liverpool. Such a stimulus is possible through a combination of developments involving downward revisions of crop estimates; winter weather unusually unfavorable for wheat; minimizing of export pressure by continued holding in the United States, diversion of much of Australia's surplus to the Orient, and the appearance of a disposition to hold back Canadian wheat; advances in business activity and in commodity prices; appreciation of foreign currencies, especially the British pound; unexpectedly heavy disappearance of wheat to China or as feed in the United States; and the appearance of Russia as an importer on a fairly large scale. But while all or several of these developments are to be listed as possible ones, few are to be regarded as probable.

2. A sustained decline of as much as 5 cents in the Liverpool May future is possible, but not probable. After a decline already practically uninterrupted for three months, and with Liverpool already so low that inclusive costs of transportation leave next to nothing as a return to many wheat farmers in export areas, there is little room for further decline at Liverpool even with the world statistical position distinctly easy. Known factors that operate against a severe decline are the low level of British stocks of import wheat, and government-sponsored holdings of futures in Canada. A combination of developments in January–March the reverse of those listed above would probably force a decline of 5 cents, and possibly of 10 cents, if deprecia-

[1] Our calculations (Table X) include an allowance for some overestimate of the crop of 1932.

tion of the British pound should prove severe. But developments of this sort are possible, not probable.

3. Available evidence is inadequate to warrant the inference that a 10-cent sustained advance in the Liverpool May future is either more or less probable than a sustained 5-cent decline or than approximate stability at a 47-cent level. Quite within the limits set by our calculations and assumptions, there are bound to be unpredictable fluctuations in new-crop prospects, in the play of demand and supply on the international market, and in business activity, commodity prices, and international finance; and these fluctuations would presumably suffice to change the Liverpool future several cents in either direction.

4. A widening (sustained) of the Chicago–Liverpool May future spread to as much as 10 cents is not probable during January–March. These futures stood at practically the same figure, 47 cents, on December 19. Winter wheat in the United States, sown on a reduced acreage and very low in December 1 condition, now is widely regarded as promising a crop of only about 440 million bushels. This prospect cannot change radically before April 1, and seems sufficient to encourage speculators and farmers in their well-attested historical tendency to withhold wheat from export in years when wheat prices are low. It is probable that occasionally the Chicago May will exceed the Liverpool May in price, and that Liverpool will stand less than 5 cents above Chicago in many days of the ensuing three months.

This issue was written by Helen C. Farnsworth, Ada F. Wyman, and M. K. Bennett, with the advice and assistance of the staff of the Institute

APPENDIX

TABLE I.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING AREAS AND COUNTRIES, 1927–32*

(Million bushels)

Year	World ex-Russia[a]	Northern Hemisphere ex-Russia[a]	Four chief exporters	United States			Canada	Australia	Argentina	USSR	Lower Danube[b]	Other Europe	Northern Africa[c]	India
				Total	Winter	Spring								
1927.....	3,588	3,118	1,755	875	548	327	480	118	282	785	272	1,002	60	335
1928.....	3,925	3,350	2,002	926	591	335	567	160	349	807	367	1,043	69	291
1929.....	3,425	3,060	1,408	813	577	236	305	127	163	694	303	1,147	77	321
1930.....	3,685	3,185	1,724	857	599	258	421	214	232	989	353	1,009	64	391
1931.....	3,628	3,155	1,614	900	787	113	304	190	220	...	368	1,065	70	347
1932.....	3,677	3,166	1,599	727	462	265	431	210	231	...	236	1,263	70	337
Average 1927–31..	3,650	3,174	1,701	874	621	253	416	162	249	819[d]	333	1,053	68	337

Year	Hungary	Jugo-Slavia	Roumania	Bulgaria	Morocco	Algeria	Tunis	Egypt	British Isles	France	Germany	Italy	Belgium[e]	Netherlands
1927.....	76.9	56.6	96.7	42.1	23.5[f]	28.3	8.1	44.3	57.2	276.1	120.5	195.8	17.0	6.2
1928.....	99.2	103.3	115.5	49.2	24.7[f]	30.3	13.7	37.3	50.9	281.3	141.6	228.6	17.9	7.3
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	13.5	5.5
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	13.7	6.1
1931.....	72.6	98.8	135.3	61.2	30.0	25.6	14.0	46.1	38.6	264.1	155.5	244.2	14.2	6.8
1932.....	58.6	53.5	73.5	50.6	22.0	32.9	14.7	52.6	40.8[g]	331.4	183.8	276.1	15.6	13.3
Average 1927–31..	81.6	86.8	115.6	48.6	26.3	29.9	11.7	42.5	48.2	277.4	136.0	227.8	15.3	6.4

Year	Scandinavia[h]	Baltic States[i]	Spain	Portugal	Switzerland	Austria	Czecho-Slovakia	Poland	Greece	Mexico	Japan, Chosen	South Africa	Chile, Uruguay	New Zealand
1927.....	25.3	10.0	144.8	11.4	4.34	12.0	47.2	61.1	13.0	11.9	38.3	5.7	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	7.2	42.0	8.83
1929.....	31.5	13.7	154.2	10.6	4.37	11.6	52.9	65.9	11.4	11.3	38.8	10.6	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	9.3	28.6	7.58
1931.....	28.7	14.7	134.4	13.0	4.36	9.4	41.2	83.3	12.2	16.2	39.2	14.1	33.2	6.66
1932.....	....	17.8	180.7	18.1	4.18	12.8	53.8	55.9	18.4	8.9	40.8	....	....	....
Average 1927–31..	29.7	13.5	140.5	11.3	4.23	11.6	49.0	70.4	11.9	12.4	38.8	9.4	39.3	7.97

* Data of U.S. Department of Agriculture and International Institute. Dots (...) indicate no data available.

[a] Excluding also China, Turkey, and a number of small producers. Production in Turkey is reported as follows in million bushels for the last six years: 49, 59, 100, 89, 110, and 74. Totals for 1932 include some rough estimates.

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

[c] Morocco, Algeria, Tunis.

[d] Four-year average, 1927–30.

[e] Including Luxemburg.

[f] Mean of maximum and minimum production reported.

[g] England and Wales only.

[h] Denmark, Norway, Sweden.

[i] Finland, Latvia, Estonia, Lithuania.

TABLE II.—WHEAT ACREAGE IN PRINCIPAL PRODUCING AREAS, 1927–32*

(Million acres)

Year	World	World ex-Russia	Northern Hemisphere ex-Russia	Four chief exporters	United States		Canada	Australia	Argentina	USSR	Lower Danube	Other Europe	Northern Africa	India
					Winter	Spring								
1927.....	311.3	233.9	196.8	114.6	38.2	21.4	22.5	12.3	20.2	77.4	18.9	52.4	7.2	31.3
1928.....	310.6	242.1	200.3	120.6	37.0	22.3	24.1	14.8	22.4	68.5	19.6	51.8	8.3	32.2
1929.....	313.1	239.6	203.5	119.2	40.6	22.1	25.3	15.0	16.2	73.5	18.3	51.7	8.5	32.0
1930.....	328.1	247.6	205.1	124.0	39.5	21.7	24.9	18.2	19.7	80.5	20.0	53.7	8.9	31.7
1931.....	331.5	239.4	202.4	113.3	41.4	14.0	26.1	14.5	17.3	92.1	20.8	54.6	8.1	32.2
1932.....	332.7	244.0	203.9	117.2	33.7	21.5	27.2	15.6	19.2	88.7	19.2	55.5	8.2	33.7
Average 1927–31..	318.9	240.5	201.6	118.3	39.3	20.3	24.6	14.9	19.2	78.4	19.5	52.8	8.2	31.9

* Sources of data and grouping of countries as described in footnotes to Table I.

TABLE III.—WHEAT RECEIPTS IN NORTH AMERICA, MONTHLY, JUNE–NOVEMBER 1927–32*

(Million bushels)

Year	United States (14 primary markets)[a]							Canada (leading terminal markets)[b]						
	June	July	Aug.	Sept.	Oct.	Nov.	July-Nov.	June	July	Aug.	Sept.	Oct.	Nov.	Aug.-Nov.
1927.....	20.7	58.8	81.6	79.7	73.2	44.8	338.1	8.0	10.8	2.5	8.9	57.6	81.7	150.7
1928.....	15.5	72.6	84.2	73.3	84.4	43.5	358.0	23.8	16.8	4.6	41.7	94.1	87.5	227.9
1929.....	25.7	94.2	101.7	47.0	36.3	20.6	299.8	17.7	17.9	3.1	32.6	36.2	23.2	95.1
1930.....	18.7	99.0	85.5	62.6	28.9	24.6	300.6	27.3	17.5	16.1	55.2	36.7	24.8	132.8
1931.....	29.7	104.0	61.5	38.9	32.7	26.4	263.5	25.4	15.3	6.0	21.8	34.5	38.4	100.7
1932.....	13.5	41.0	40.7	38.4	27.2	17.6[c]	164.9	31.8	19.7	18.3	60.5	39.7	28.5[c]	147.0

* United States data unofficial, compiled from *Survey of Current Business;* Canadian data computed from official figures given in *Canadian Grain Statistics.*

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

[b] Fort William, Port Arthur, Vancouver, and Prince Rupert.

[c] Preliminary.

TABLE IV.—WHEAT VISIBLE SUPPLIES, AUGUST–NOVEMBER 1932, WITH COMPARISONS*

(Million bushels)

Date	Total	United States 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						
Aug. 1, 1927.....	150.1	33.7	1.3	37.8	4.8	77.6	46.1	7.7	53.8	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.....	325.5	136.4	2.3	83.8	22.9	245.4	37.6	6.3	43.9	20.0	16.2
1930.....	357.6	161.9	3.9	89.5	16.1	271.4	39.2	6.5	45.7	33.5	7.0
1931.....	443.0	233.6	22.9	105.8	5.5	367.8	37.9	10.6	48.5	20.0	6.6
1932.....	386.5	175.9	15.4	116.7	4.7	312.7	31.4	10.9	42.3	24.5	7.0
Dec. 1, 1927.....	290.8	91.6	5.2	91.7	31.3	219.8	57.1	9.6	66.7	0.7	3.6
1928.....	419.3	140.2	8.3	154.0	35.2	337.7	63.5	5.7	69.2	8.0	4.4
1929.....	480.5	189.9	9.1	188.1	35.1	422.2	28.6	20.6	49.2	1.8	7.3
1930.....	485.3	206.6	4.8	174.9	30.4	416.7	45.7	13.9	59.6	5.0	4.0
1931.....	527.6	236.6	29.7	169.2	16.7	452.2	35.7	29.5	65.2	5.8	4.4
1932.....	480.5	176.4	7.0	221.1	15.2	419.7	39.6	7.6	47.2	7.0	6.6
1932											
Aug. 6.....	382.7	177.7	15.0	117.1	4.6	314.4	27.2	9.6	36.8	24.5	7.0
13.....	375.2	179.3	14.7	110.0	6.0	310.0	24.5	9.7	34.2	24.0	7.0
20.....	368.6	180.7	13.1	108.0	5.4	307.2	23.6	9.2	32.8	22.0	6.6
27.....	371.0	184.5	12.1	110.3	5.5	312.4	23.1	8.0	31.1	20.5	7.0
Sept. 3.....	374.3	188.3	11.3	111.1	5.6	316.3	24.5	8.3	32.8	18.5	6.7
10.....	376.7	189.7	10.1	120.0	5.8	325.6	20.9	7.8	28.7	16.5	5.9
17.....	403.9	191.2	9.6	145.9	7.4	354.1	22.2	8.2	30.4	13.5	5.9
24.....	425.9	193.1	8.7	166.6	7.8	376.2	25.6	7.7	33.3	10.5	5.9
Oct. 1.....	454.8	194.8	8.5	187.2	11.0	401.5	29.7	7.6	37.3	9.8	6.2
8.....	470.0	195.3	8.3	198.2	11.0	412.8	34.1	8.2	42.3	8.3	6.6
15.....	479.6	195.2	8.2	209.9	11.5	424.8	32.4	9.2	41.6	7.0	6.2
22.....	483.6	193.5	7.7	216.6	12.8	430.6	31.8	10.0	41.8	5.3	5.9
29.....	485.8	191.9	7.7	222.6	13.9	436.1	31.9	8.8	40.7	3.5	5.5
Nov. 5.....	489.7	189.3	7.5	226.6	15.5	438.9	34.5	8.2	42.7	2.2	5.9
12.....	492.0	188.5	7.5	227.0	15.9	438.9	38.7	7.7	46.4	1.2	5.5
19.....	482.9	186.1	7.1	224.9	13.9	432.0	38.4	6.4	44.8	0.2	5.9
26.....	478.5	181.6	7.0	222.7	13.9	425.2	38.1	6.0	44.1	3.0	6.2
Dec. 4.....	480.5	176.4	7.0	221.1	15.2	419.7	39.6	7.6	47.2	7.0	6.6

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

TABLE V.—PRICES OF REPRESENTATIVE WHEATS IN BRITISH MARKETS AND PRINCIPAL EXPORTING COUNTRIES, WEEKLY FROM AUGUST 1932*

(U.S. cents per bushel)

Week ending	British parcels	Liverpool (Tuesday prices)					United States					Winnipeg		Buenos Aires 80-kilo
		No. 1 Manitoba	No. 3 Manitoba	No. 2 Hard Winter	Argentine Rosafé	Australian f.a.q.	All classes	No. 2 Hard Winter (Kansas City)	No. 2 Red Winter (St. Louis)	No. 1 Northern Spring (Minneapolis)	No. 2 Amber Durum (Minneapolis)	Weighted average	No. 3 Manitoba	
Aug. 6	56	62	58	n.q.	57	59	51	46	51	57	56	48	46	47
13	58	63	60	62[a]	60	61	56	49	55	60	62	49	47	49
20	56	62	59	59	58	61	55	47	53	58	57	48	46	48
27	55	61	57	58	58	60	55	47	53	57	56	47	44	47
Sept. 3	58	62[a]	60	n.q.	59	61	57	49	56	59	56	48	46	48
10	60	63[b]	61	n.q.	60	62	56	49	55	59	55	48	46	49
17	58	60[b]	57	n.q.	59	62	53	46	52	56	52	45	42	47
24	58	58[b]	56[b]	n.q.	58	63	56	49	53	57	52	45	42	47
Oct. 1	58	58[b]	57[b]	n.q.	58	62	55	49	53	57	54	44	42	47
8	57	57[b]	56[b]	n.q.	59	60	53	47	52	55	54	43	41	47
15	56	56[b]	54[ab]	n.q.	57	58	51	45	49	53	51	43	41	46
22	56	56[b]	54[b]	n.q.	55	57	51	45	49	54	51	44	42	45
29	53	56[b]	54[b]	n.q.	53	56	49	43	48	52	48	42	41	44
Nov. 5	52	54	52[b]	n.q.	50[c]	55[a]	48	42	47	48	47	41	39	42
12	52	54[b]	52[ab]	n.q.	48[c]	54	50	44	48	50	50	41	39	42
19	52	54	53[b]	n.q.	50[c]	53[a]	51	44	48	..	52	40	39	42
26	52	53[b]	52[b]	n.q.	49[c]	52	48	41	48	49	49	40	37	..

* For sources and methods of computation, see WHEAT STUDIES, January 1932, Table XXIII.

[a] Parcels to London. [b] Vancouver wheat. [c] New crop wheat.

TABLE VI.—MONTHLY AVERAGE PRICES OF DOMESTIC WHEAT IN EUROPE, MAY–NOVEMBER, 1927–32*

(U.S. cents per bushel)

Year	GERMANY (BERLIN)							FRANCE (PARIS)						
	May	June	July	Aug.	Sept.	Oct.	Nov.	May	June	July	Aug.	Sept.	Oct.	Nov.
1927	192	196[a]	n.q.	178[b]	168	162	157	193	194	185	180	168	160	158
1928	173	166	160	149	136	138	137	195	191	182	166	164	167	166
1929	141	139	162	159	147	150	151	168	167	170	158	152	153	150
1930	187	195	187	163	155	147	160	135	140	171	180	175	173	176
1931	183	176	155	134	136	136	146	195	199	186	172	163	165	162
1932	176	165	154	136	135	129	...	184	180	179	135	123	120	119
	ITALY (MILAN)							GREAT BRITAIN						
1927	216	199	180	175[c]	173	177	190	158	165	164	163	143	137	132
1928	214	210	177	172	181	188	187	143	143	141	133	119	124	128
1929	189	191[c]	177	174	175	184	185	129	125	135	152	129	124	122
1930	196	202	177	180	177	170	163	114	111	108	109	95	91	87
1931	160	143	131	126	133	133	140	75	78	82	83	58	59	67
1932	169	157	137	137	145	146	152	61	62	61	59	53	51	48

* For sources and methods of computation, see WHEAT STUDIES, December 1932, Table XXXV.

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

TABLE VII.—INTERNATIONAL SHIPMENTS OF WHEAT AND FLOUR, WEEKLY, AUGUST–NOVEMBER, 1932*

(Million bushels)

Week ending	Total	Shipments from							Shipments to Europe				To ex-Europe		
		North America	Argentina[a]	Australia	South Russia	Danube	India	Other countries[b]	Total	United Kingdom	Orders	Continent	Total	China, Japan	Others
Aug. 6	7.78	4.47	0.46	2.33	....	0.19	...	0.33	4.30	0.97	0.47	2.86	3.48	0.96	2.52
13	7.28	4.88	0.67	1.10	....	0.12	...	0.50	5.05	2.04	0.45	2.56	2.23	0.68	1.55
20	6.15	4.35	0.86	0.54	....	0.11	...	0.30	4.34	1.36	0.64	2.34	1.81	0.73	1.08
27	7.96	4.94	1.14	0.92	0.14	0.16	...	0.65	6.06	2.58	1.27	2.21	1.90	0.76	1.14
Sept. 3	10.96	7.70	0.58	0.92	0.70	0.19	...	0.86	8.92	3.96	0.62	4.34	2.04	0.72	1.32
10	6.19	3.17	0.72	0.53	0.50	0.17	...	1.10	4.98	2.39	0.47	2.12	1.21	0.49	0.72
17	10.89	5.61	0.63	1.74	2.08	0.10	...	0.73	9.02	3.31	2.19	3.52	1.86	0.85	1.01
24	14.77	8.44	1.24	2.55	0.95	0.06	...	1.52	11.34	3.95	4.13	3.26	3.43	2.33	1.10
Oct. 1	13.09	7.98	0.77	1.41	1.91	0.10	...	0.92	10.64	3.42	3.58	3.64	2.45	1.21	1.24
8	14.87	10.20	0.52	2.32	1.00	0.26	...	0.58	12.08	4.14	2.22	5.72	2.79	1.60	1.19
15	11.54	7.29	0.49	2.10	0.58	0.21	...	0.87	8.73	3.30	2.77	2.66	2.81	1.50	1.31
22	12.86	9.62	1.30	1.06	0.21	0.06	...	0.61	9.87	2.22	2.99	4.66	2.99	1.65	1.34
29	9.94	6.76	0.56	1.42	0.28	0.13	...	0.79	8.39	4.41	1.21	2.77	1.55	0.89	0.66
Nov. 5	14.35	8.54	0.57	2.77	1.54	0.24	...	0.69	10.88	4.20	2.02	4.66	3.47	1.73	1.74
12	14.13	9.27	0.98	1.76	0.94	0.42	...	0.77	10.58	5.45	0.71	4.42	3.55	1.67	1.88
19	10.81	6.98	0.83	1.30	0.86	0.51	...	0.32	8.44	2.59	1.48	4.37	2.37	0.98	1.39
26	12.61	8.74	1.03	1.97	0.59	0.06	...	0.22	9.98	3.79	1.44	4.75	2.63	0.70	1.93

* Here converted from data in Broomhall's *Corn Trade News*. Dots (...) indicate no shipments reported.

[a] Including Uruguay. [b] Mainly northern Africa and Germany.

TABLE VIII.—NET IMPORTS OF WHEAT AND FLOUR, MONTHLY FROM JULY 1932*

(Million bushels)

Month	British Isles			Three variable importers				Belgium[b]	Netherlands	Scandinavia				Switzerland
	U.K.	I.F.S.	Total	Total	Italy	Germany	France[a]			Denmark	Norway	Sweden	Total	
July	19.05	1.57	20.62	18.22	2.78	5.66	9.78	4.25	2.48	1.00	0.47	0.48	1.95	1.70
Aug.	17.76	1.74	19.50	11.77	0.02	2.15	9.60	2.93	2.24	1.62	0.40	0.85	2.87	1.82
Sept.[c]	16.00	1.69	17.69	1.09	(0.15)	(2.40)	3.64	2.61	1.82	1.27	0.71	0.43	2.41	1.64
Oct.[c]	20.15	1.29	21.44	8.59	0.49	(1.61)	2.29[d]	4.33	3.09	1.20	0.62	0.41	2.23	1.82

Month	Austria	Czecho-Slovakia	Greece	Spain	Portugal	Finland	Latvia	Estonia	Lithuania	Four Baltic states	Egypt	Japan	New Zealand	South Africa
July	0.98	2.07	1.54	2.54	1.32	0.40	0.25	0.00	(0.01)	0.64	0.17	(0.27)	0.38[e]	....
Aug.	0.69	0.49	1.70	0.84	0.23	0.41	0.02	0.00	(0.01)	0.42	0.04	(0.09)	0.44	....
Sept.[c]	0.76	0.29	1.54	4.38	0.15	0.41	0.00	0.00	(0.00)	0.41	....	0.12	....	....
Oct.[c]	0.93	0.16	1.73	0.15	0.02	0.38	0.00	0.00	(0.00)	0.38	....	0.31	....	....

* Data from official sources and International Institute of Agriculture. Dots (...) indicate data are not available. Figures in parentheses represent net exports.

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

[b] Including Luxemburg.

[c] Figures for September and October are preliminary for many countries.

[d] Net imports in "commerce spécial."

[e] June and July.

TABLE IX.—NET EXPORTS OF WHEAT AND FLOUR, MONTHLY FROM JULY 1932*

(*Million bushels*)

Month	United States[a]	Canada	Argentina	Australia	Four exporters	USSR	Hungary	Jugo-Slavia	Roumania	Bulgaria	Poland	Algeria	Tunis	India
July	4.21	21.62	3.05	8.38	37.26	(0.43)	0.21	0.20	0.12	0.30	0.34	0.69[b]	2.44	0.09
Aug.	5.57	19.76	3.88	3.85	33.06	(0.86)	0.81	0.22	0.08	0.31	0.05	2.27	1.22	0.10
Sept.[c]	3.87	27.60	3.41	7.24	42.12	4.90	1.36	0.14	0.03	0.17	(0.04)	1.16	0.79	0.13
Oct.[c]	4.23	42.55	3.21	7.95	57.94	3.22	0.83	0.08	0.00	0.36	(0.02)	....	0.77	0.08
Nov.[c]	....	29.90	....	....	.....	....	....	....	....	....	....	....	....	....

* See general footnote to Table VIII. Here figures in parentheses represent net imports.

[a] Includes shipments to possessions. [b] June and July. [c] Figures preliminary for many countries.

TABLE X.—WHEAT DISPOSITION ESTIMATES, ANNUALLY FROM 1927–28*

(*Million bushels*)

Year	Domestic supplies			Domestic disappearance				Surplus over domestic use[c]	Net exports, wheat and flour			End-year stocks
	Initial stocks	New crop	Total	Milled (net)	Seed use	Balancing item[a]	Total[b]		Total	To Nov. 30	From Dec. 1	
	A. UNITED STATES (JULY–JUNE)											
1927–28	118	875	993	503	93	80	676	317	193	139	54	124
1928–29	124	926	1,050	510	85	68	663	387	145	81	64	242
1929–30	242	813	1,055	508	85	28	621	434	143	78	65	291
1930–31	291	857	1,148	492	81	141	714	434	115[d]	72	43	319
1931–32	319	900	1,219	485	79	165	729	490	127[d]	64	63	363
1932–33	363	727	1,090	490	75	105	670	420	50	23	27	370
	B. CANADA (AUGUST–JULY)											
1927–28	48	480	528	42	42	43	117	411	333	113	220	78
1928–29	78	567	645	44	44	47	135	510	406	190	216	104
1929–30	104	305	409	43	44	26	113	296	185	70	115	111
1930–31	111	421	532	43	36[e]	61	140	392	258	120	138	134
1931–32	134	304[f]	438	42	37[e]	21	100	338	207	82	125	131
1932–33	131	431	562	42	36	49	127	435	285	120	165	150
	C. AUSTRALIA (AUGUST–JULY)											
1927–28	23	118	141	32	15	− 4	43	98	71	12	59	27
1928–29	27	160	187	29	15	+ 7	51	136	109	18	91	27
1929–30	27	127	154	32	18	+ 4	54	100	63	14	49	37
1930–31	37	214	251	32	14	+ 7	53	198	152	24	128	46
1931–32	46	190	236	32	15	− 7	40	196	156	33	123	40
1932–33	40	210	250	32	15	+ 3	50	200	160	27	133	40
	D. ARGENTINA (AUGUST–JULY)											
1927–28	69	282	351	60	25	− 8	77	274	179	22	157	95
1928–29	95	349	444	61	23	+ 8	92	352	222	40	182	130
1929–30	130	163	293	60	26	− 9	77	216	151	71	80	65
1930–31	65	232	297	60	21	+12	93	204	124	14	110	80
1931–32	80	220	300	60	24	+16	100	200	140	25	115	60
1932–33	60	231	291	61	24	+ 6	91	200	120	14	106	80

* Based on official data so far as possible; see WHEAT STUDIES, December 1932, Table XXXI. Data for 1932–33, except initial stocks and new crops, are mainly our preliminary forecasts.

[a] Total domestic disappearance minus quantities milled for food and used for seed.

[b] Total domestic supplies less surplus over domestic use.

[c] Summation of net exports and end-year stocks.

[d] Too low; does not include some wheat shipped to Canada and eventually exported from there.

[e] Probably too low for comparison with earlier years.

[f] Officially regarded as 18–26 million bushels too low.

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