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WORLD WHEAT SURVEY AND OUTLOOK

SEPTEMBER 1937

Helen C. Farnsworth and Holbrook Working

Outstanding among developments in the wheat situation during May–September was the near failure of the Canadian spring-wheat crop. In response, futures prices rose spectacularly from mid-June to peaks in mid-July only a little below those for the May future in April. The subsequent downward phase of the crop-scare cycle carried Chicago prices below the lows of mid-June; but at Liverpool, and especially at Winnipeg, prices declined somewhat less than they had previously advanced.

Despite the poor crop in Canada, the world crop ex-Russia now promises to be about 290 million bushels larger than last year. Even with somewhat heavier Russian exports, however, total supplies may be only about 50 million bushels larger, since “world” stocks of old-crop wheat as of August 1, 1937 were about 270 million bushels lower than a year earlier.

World net exports will probably approximate 550 million bushels, as compared with 605 million in 1936–37. Net imports of European net-importing countries may be reduced about 35 million bushels, and the takings of non-European countries about 15 million. Argentina and Australia now seem likely to export only 200 million bushels in 1937–38, and Canada may ship only 80 million. Unless other countries have larger supplies than now indicated, the United States will probably export about 130 million bushels.

“World” wheat disappearance may be slightly lower than last year. Year-end stocks in 1938 may be 50–100 million bushels larger than in 1937, with the United States carryover increased to perhaps 185 million bushels. Prices during October–December will not be especially sensitive to alterations in supply prospects, and may change little except for moderate fluctuations.

STANFORD UNIVERSITY, CALIFORNIA

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WORLD WHEAT SURVEY AND OUTLOOK

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From May to mid-September world wheat markets were dominated by two principal influences: variations in traders' judgment as to the tightness of the near-supply position, and changing prospects for growing wheat crops, especially in North America. Until the end of May, English traders continued to show concern over the possible inadequacy of wheat supplies for July and August; Liverpool prices were consequently firm, and North American markets, though more responsive to the favorable outlook for North American crops, were well supported by the strength at Liverpool. But from the last week of May to about mid-June, prices declined sharply in all markets, on reports of continued excellent prospects for the United States winter-wheat crop and on accumulated evidence that ample supplies for the final weeks of the season were assured. The Continental demand for import wheat had died down, and increased exports from the Danube countries, Australia, and India had partially offset the drastic reduction in Argentine shipments.

By mid-June, wheat traders began to center attention upon current sensational reports of crop damage in Canada. A Canadian official report, issued June 8, confirmed private beliefs that the crop of Saskatchewan had seriously deteriorated before the end of May. Continued drought and heat during the next few weeks resulted in "the most serious crop disaster in the Prairie Provinces ever to be recorded this early in the season." Mainly in response to these developments, wheat futures prices rose sharply to peaks in mid-July that were only 5-15 cents under the highest prices reached for May futures in the

spring of 1936-37. Such high prices could not be sustained. Despite reports of further deterioration of the Canadian crop, wheat futures declined precipitously from mid-July to late August. Thereafter, price trends at Liverpool and Chicago diverged to reach a spread at which the United States could export more freely despite rising freight rates.

Despite the poor outlook of wheat in Western Canada, the Northern Hemisphere wheat crop of 1937 is moderately large. If Southern Hemisphere crops approximate current forecasts, the world crop ex-Russia will be about 290 million bushels larger this year than last. But since "world" stocks of old-crop wheat were about 270 million bushels smaller as of

August 1, 1937 than in 1936, total supplies from crops and carryovers are about the same for 1937-38 as they were in 1936-37. Russian exports will be larger this year, perhaps about 25 million bushels as compared with 4 million in 1936-37.

On the basis of current estimates of crops and stocks, we forecast world net exports of wheat in 1937-38 at 550 million bushels—about 55 million less than reported for last year. European net-importing countries may take net imports of around 420 million bushels this year as compared with 455 million in 1936-37; and non-European countries will probably reduce their imports by about 15 million bushels, reflecting the prospective shift in the net trade position of the United States. This country, a net importer last year, may be expected to furnish net exports of about 130 million bushels in 1937-38. Present crop forecasts suggest exports of only 200 million bushels from Australia and Ar-

CONTENTS	
	PAGE
<i>Trade and Utilization in 1936-37</i>	2
<i>Development of 1937 Crops..</i>	7
<i>Prices and Spreads.....</i>	12
<i>Supplies Available for 1937-38</i>	19
<i>Outlook for Trade.....</i>	22
<i>Outlook for 1938 Carryovers</i>	26
<i>Outlook for Prices.....</i>	28
<i>Appendix Tables</i>	31

gentina, a notably small quantity but larger than in 1935-36, and around 80 million bushels from Canada, the smallest in postwar years.

Disappearance of wheat in the world ex-Russia may be moderately lower in 1937-38 than in 1936-37, because of reduced feeding of wheat in the United States and reduced consumption for food and feed in Germany. "World" wheat stocks as of about August 1, 1938 will again be relatively small, but probably 50-100 million bushels larger than a year earlier. The United States carryover may now be forecast at 185 million bushels, about twice its size in 1937; but if the total volume of world trade differs materially from our present forecast, or if other countries have larger or smaller exportable supplies than is now indicated, United States exports and the United States carryover will be correspondingly affected.

During October-December, wheat prices in the principal markets may fluctuate within only a moderate range, with little sustained tendency to advance or decline from recent price levels near \$1.05 for the Chicago May future and \$1.25 for the Liverpool March and the Winnipeg May futures. Price relations among the markets will depend somewhat on the course of ocean freights, which lately have been advancing. In sharp contrast with recent years, the general course of prices will depend largely on reactions of the Chicago futures market to the outlook for a moderate surplus at the end of the crop year. Changes in Southern Hemisphere crop prospects, unless extreme, may have relatively little influence on the level of prices during October-December.

TRADE AND UTILIZATION IN 1936-37

World wheat exports.—Relatively light shipments during the last quarter of 1936-37 brought total net exports for the crop year to slightly over 600 million bushels, closely in line with our forecast published last May. The reported trade of 1936-37 was the largest since 1932-33 and roughly 80 million bushels larger than in 1935-36. So striking an increase was not expected at the beginning of 1936-37. Trade forecasts of August-October

1936 understated the actual movement by 75-80 million bushels, mainly because of lack of reliable information on the wheat-supply positions of several European countries and difficulties in predicting governmental import policies. The wheat imports of Germany, Italy, and Spain, in particular, were greatly underestimated early in the crop year.

The relative importance of various sources of wheat exports in 1936-37 is shown by the following tabulation of reported net exports in million bushels. Detailed trade statistics are not presented for the United States, although that country contributed substantial quantities to the total volume of exports prior to 1934-35. In the past three years the United States has been a net importer of wheat (p. 5).

Aug.-July	Total	Canada	Argentina	Australia	Lower Danube	French North Africa	USSR	Others ex-U.S.
1931-32	795	207	140	156	82	22	65	8
1932-33	630	264	132	150	12	20	17	2
1933-34	555	194	147	86	35	20	34	10
1934-35	541	165	182	109	22	26	2	35
1935-36	523	254	70	102	25	19	29	24
1936-37:								
Forecast ^a	600	200	155	110	85	10 ^b	3	37
Reported ^c	605	195	162	102	89	6 ^a	4	47

^a In mid-May.

^b Not deducting net imports of Morocco and Tunis.

^c Partly estimated. See Table VIII.

Outstanding features of the wheat export movement of 1936-37 were the record large exports from the Danube basin, notably small exports from French North Africa, and the largest net exports since 1924-25 from "other" minor exporting countries (mainly India, Czechoslovakia, Poland, Turkey, and Iraq in 1936-37). Argentina's exports were of record size during January-April 1937, and for the crop year as a whole they constituted a larger percentage of the world total than in any preceding year except 1933-34 and 1934-35.

Most of these developments reflected the distribution of the 1936 world wheat crop. But Argentine exports and exports from "other" countries would have been smaller than they were, if the world wheat-supply position of 1936-37 had been regarded as less strikingly tight and if world wheat prices had stood at a lower level. Under the existing cir-

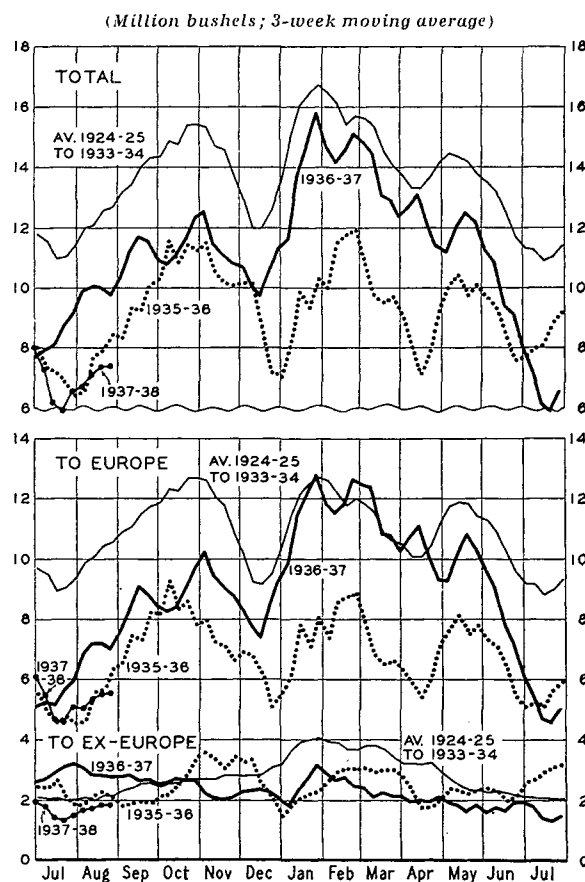
cumstances of supplies and price, arrangements were made for extraordinarily rapid movement of Argentine wheat to export in January—April 1937; the Czechoslovakian Grain Monopoly seized the opportunity to dispose of a considerable portion of its surplus wheat stocks through export channels; and India shipped 19 million bushels from domestic wheat supplies no larger than had been available in either of the two preceding years, when exports had totaled only about a million bushels.

The abnormal seasonal distribution of world wheat exports in 1936-37 is well illustrated by Chart 1. Outstanding is the extraordinarily heavy concentration of shipments in January–April 1937. Not even in 1924-25 or 1926-27, and probably never before, had January–April shipments represented so large a proportion of the crop-year total. After the virtual exhaustion in April of the supplies that Argentina could spare for Europe, small world shipments in May–July were reasonably to be expected. Actually, May–July shipments were a little larger in 1937 than in either of the two preceding years, but as a percentage of the year's total they were smaller than in any other postwar year except 1924-25.

During August–December 1936, exportable supplies of wheat were small and located mainly in Canada. In anticipation of fairly good Southern Hemisphere crops, and because new-crop Argentine and Australian wheats were selling considerably below available Canadian varieties, Europeans imported no more wheat than was absolutely required during the early months of the crop year, but purchased Argentine wheat heavily for January–March shipment. From early December, the demand for Southern Hemisphere wheats was increased by speculative purchases induced by rumors of heavy import buying by Italy and Germany—countries whose import requirements had previously been regarded as small. Under this combination of influences the new Argentine crop moved to export much more rapidly than usual, establishing a new high record for Argentine exports in January–March (Chart 2). After mid-April, shipments from Argentina declined as rapidly as they had previously expanded, and their decline

was only partially offset by exceptionally heavy exports from several minor exporting countries (mainly the Danube countries and India). Throughout May the European (particularly German) import demand was well sustained, but during most of June–July Europeans bought sparingly while they drew upon the reserves of foreign wheat they had accumulated through earlier purchases.

CHART 1.—SHIPMENTS OF WHEAT AND FLOUR, WEEKLY FROM JULY 1936, WITH COMPARISONS*

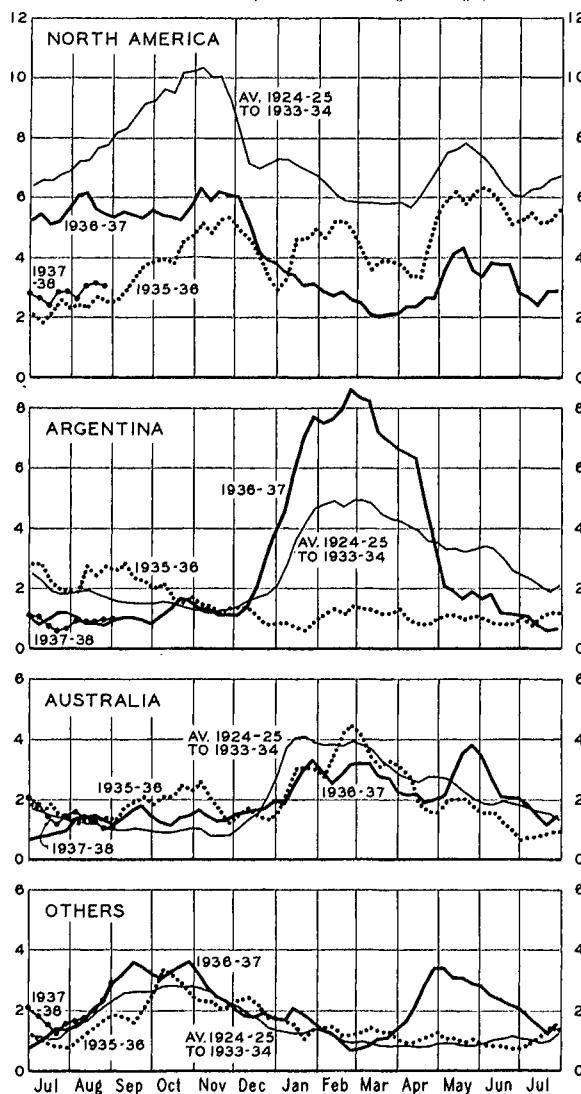


* See Table VII.

Distribution of imports.—The increased international movement of wheat in 1936-37 resulted solely from enlarged takings of foreign wheat by the importing countries of Continental Europe. British imports were the smallest in recent years; the takings of non-European countries other than the United States continued their recent downward trend; and even the United States imported

(net) 14 million bushels less wheat in 1936-37 than in 1935-36.

CHART 2.—SHIPMENTS BY SOURCES, WEEKLY FROM JULY 1936, WITH COMPARISONS*
(Million bushels; 3-week moving average)



* See Table VII.

The total net imports of European net importing countries (including the British Isles) approximated 455 million bushels in 1936-37, by far the largest figure in five years. This expansion of trade appears not to have reflected in significant degree an increased demand due either to preparation for war or to improvement in general economic conditions—two factors important in the concurrent increase of trade in a number of other commodities.

The larger European imports of wheat were rather a reflection of reduced domestic wheat supplies in a few countries, specifically Italy, Germany, Spain, and Greece (see p. 6). Increases in the net imports of various other European countries were small, and in total were more than offset by reductions in the British Isles, Denmark, Finland, and Czechoslovakia (see Table VIII).

Portugal, Sweden, Lithuania, and Latvia, all of which had ranked as net exporters of wheat in 1935-36, were small net importers in 1936-37. On the other hand, Czechoslovakia shifted from its customary position as a net importer to become the fourth largest net exporter in Europe.¹

Danubian, Czechoslovakian, and Polish exports were relatively so large in 1936-37 that the increased demand of European net importing countries was supplied to a considerable extent within the boundaries of Europe ex-Russia. Nevertheless, the demand for exports made upon countries outside this area was larger than in any of the three preceding years.

Non-European countries as a group took less foreign wheat in 1936-37 than in any other year since 1924-25. The net imports of the leading importing countries are reported for the past five years as follows, in million bushels:

Aug.- July	Total ex- U.S.	Bra- zil	China	Man- chu- kuo	Japan	W. Indies and U.S. posses- sions ^a	Others ex- U.S. ^b	U.S.
1932-33..	180	31	56	30 ^c	4	12	47	.. ^d
1933-34..	143	34	21	24	3	12	49	.. ^d
1934-35..	150	34	21	31	1	12	51	4
1935-36..	124	36	8	14	5	13	48	31
1936-37 ^e .	109	36	2	6	4	12	49	17

^a Exports of the United States and Canada to the West Indies, plus shipments of the United States to her possessions.

^b Including some 95 political divisions for which import data are available in publications of the International Institute of Agriculture. See p. 5, second tabulation, note a.

^c Partly estimated.

^d Net exports.

The reduced trade of non-European countries in 1936-37 mainly reflected reduction of

¹ Outside of Europe, South Africa and Egypt ranked as small net exporters for the first time in postwar years.

wheat imports into China and Manchukuo, countries whose wheat-import trade depends largely upon the level of world wheat prices. As wheat prices rose in 1935-36 those two countries began sharply to curtail imports. In 1936-37, the Chinese wheat crop was so large that wheat consumption must have been fairly heavy in China despite negligible imports; but in Manchukuo, where the 1936 wheat harvest was below average size, reduced imports were apparently associated with the lowest level of wheat consumption in at least five years.

As compared with 1935-36, the reduced wheat imports of non-European countries in 1936-37 also reflected smaller imports of Canadian wheat into the United States. In both years, however, the net trade position of the United States rested upon unprecedented crop losses, which caused this country to shift from its normal position as a net exporter to second rank among non-European net importers. As shown by the tabulation below, in million bushels, the reduction in United States net imports between 1935-36 and 1936-37 was much smaller for the official crop year, July-June, than for the more common Northern Hemisphere crop year of August-July.

July-June	Net imports ^b	Imports for consumption ^a		For milling for export	Exports		Shipments to possessions
		42-cent duty	10 per cent duty		Flour	Grain	
1933-34..	(28.1) ^c	0.1	0.0	11.3	18.2	18.8	2.7
1934-35..	1.4	5.9	8.1	11.1	18.5	3.0	2.7
1935-36..	28.6	25.3	9.2	12.0	15.6	.3	2.8
1936-37..	22.9	30.2	4.1	13.5	18.4	3.2	2.9

^a Grain imports only; flour imports are negligible.

^b Statistics for "general trade" adjusted for shipments to possessions (see Table VIII); not based upon import data in the following columns.

^c Net exports.

Although the total quantity of wheat imported net by the United States was smaller in 1936-37 than in 1935-36, gross imports of good millable wheat, dutiable at 42 cents per bushel, were larger in 1936-37. This increase was more than offset by reduced purchases of foreign wheat for feed (10 per cent duty) and by increased exports of domestic wheat both as flour and as grain. The larger domes-

tic exports originated in the Pacific Northwest and were destined mainly for Europe. A small increase in flour exports to the Philippines, equal to about 750,000 bushels of wheat, was attributable in part to continuation of the government indemnity program operative since March 1936.¹

The relationship between world net exports and total net imports in 1936-37 is summarized below, with comparisons, in million bushels. This represents an attempt to sum-

Aug.-July	Net imports				Stocks in transit ^b	Calculable demand ^c	Total net exports	Difference
	Europe	Non-Europe I ^a	Non-Europe II ^a	Total				
1932-33..	442	160 ^d	20	622	-15	607	630	23
1933-34..	395	122	21	538	+ 2	540	555	15
1934-35..	375	132	22	529	-16	513	541	28
1935-36..	356	133	22	511	+11	522	523	1
1936-37 ^d ..	455	104	22	581	-10	571	605	34

^a "Non-Europe I" includes the reported net imports of all non-European countries for which trade data are available on an August-July or July-June crop-year; this includes net imports of the United States during August-July as given in the tabulation on p. 4. "Non-Europe II" includes our estimates of the crop-year net imports of countries whose reported trade is available only on a calendar year basis; for this group the figure for 1936-37 is only a rough approximation.

^b Changes in stocks, including Canadian wheat in the United States, United States wheat in Canada, and stocks afloat to Europe.

^c The algebraic sum of the two preceding columns.

^d Partly estimated.

marize for the first time data on the total net imports of non-European countries.² When these data are added to the aggregate net imports of European net-importing countries and allowance is made for changes in stocks afloat and in comparable positions, the total should represent practically the entire world demand for net exports.

The "difference" figures shown above may be interpreted to cover small net imports of a number of countries for which annual trade data are not yet available, changes in certain invisible bonded stocks, and (most important) sizable errors in certain of the official statistics of imports and/or exports. For most

¹ See our review of the crop year 1935-36, *WHEAT STUDIES*, December 1936, XIII, 180.

² For many of these countries, data have only recently become available through the International Institute of Agriculture.

commodities *import* data are generally regarded as somewhat more accurate than *export* data; but this generalization cannot be applied without special investigation to such a commodity as wheat, which is drawn from a few exporting countries to be distributed widely among a large number of importing countries. In any case, the sizable annual variation in the "difference" between total exports and total imports seems to defy logical explanation or prediction. For 1936-37 this "difference" now appears to have been larger than in any of the four preceding years.

World wheat utilization.—Our revised estimates of world wheat stocks as of August 1 (see p. 19) and standing crop estimates suggest a slightly larger disappearance of wheat in the world ex-Russia in 1936-37 than in any of the four preceding years.¹ This statistical implication, however, rests heavily upon the questionably high official estimate of the Turkish wheat crop of 1936.² If Turkey is excluded from our supply series for the "world ex-Russia" (except for the addition of her net exports), "world" wheat disappearance in 1936-37 appears to have been slightly lower than in three of the four preceding years. Estimated utilization figures are given below in million bushels for the principal areas.

Year	"World" ^a	"World" ex-Turkey	Europe ex-Danube	U.S.	Three chief ex-ports ^b	Lower Danube ^c	Orient ^d ex-China	Outside shipments ^e
1932-33	3,738 ^f	3,669 ^f	1,619 ^f	718	257	232	477	103
1933-34	3,774	3,677	1,666	628	263	305	485	69
1934-35	3,742	3,646	1,677	653	247	261	462	71
1935-36	3,756	3,664	1,671	664	269	272	461	60
1936-37	3,789	3,656	1,653	696	261	284	446	54

^a See tabulation on supplies and disappearance, p. 22; excluding USSR, China, and several smaller producers.

^b Canada, Argentina, Australia. For distribution, see Table IX.

^c Hungary, Yugoslavia, Rumania, Bulgaria.

^d India (April-March), Japan, Manchukuo, Chosen. For 1932-33 the net imports of Manchukuo are here estimated at 30 million bushels.

^e Estimated shipments from the "world" ex-Russia (as here defined) to outside areas such as China, the West Indies, etc.

^f Probably too low, reflecting underestimation of the French crop by about 30 million bushels.

As compared with 1935-36, reduced disappearance of wheat in 1936-37 in importing Europe, in the Orient, in the three chief ex-

porting countries, and in shipments to areas outside the "world" ex-Russia just about offset the increase in wheat utilization in the United States and the Danube basin. Other countries (excluding Turkey) account for a calculable net reduction in wheat disappearance of almost 15 million bushels. This reflects decreased use of wheat for food and seed in French North Africa and several other countries in 1936-37, but it also reflects reduction of wheat stocks in South Africa, Uruguay, and perhaps Syria—countries not covered by our estimates of "world" stocks. Turkey probably built up her wheat stocks to a high level in 1937; but these stocks, too, are omitted from our "World" stocks totals.

Within *Europe ex-Danube*, considerably less wheat was used for feed in 1936-37 in the British Isles, Belgium, Netherlands, Denmark, and France than for several years past;³ but in central and eastern Europe wheat utilization for food and (in Germany) for feed was significantly increased in 1936-37, partly in response to rapidly growing populations, partly in reflection of generally improved economic conditions. The situation in Germany was extraordinary. There, the relationship of fixed wheat prices to prices of meats and animal products encouraged heavy feeding of wheat on farms during the first few months of the crop year. Despite subsequent governmental regulations designed to prevent further diversion of bread grains into feed channels and to curtail human consumption of wheat, German wheat utilization in 1936-37

¹ See tabulation on p. 22.

² At 138.5 million bushels, the 1936 crop estimate for Turkey is 45 million bushels (about 33 per cent) above the 1930-34 average and 33 million bushels (almost 25 per cent) above the previous record high estimate for the crop of 1931; the reported acreage for 1936 is the largest on record, and the indicated yield per acre is equal to the record high yield of 1929, which was obtained from an area almost 2.5 million acres smaller. The 1936 crop estimate may also be questioned on the basis of trade statistics: reported net exports of wheat in 1936-37 were only about .5 million bushels larger than in 1934-35, when the Turkish wheat crop was estimated at only 100 million bushels, other domestic food crops were much smaller, and world wheat prices were much lower.

³ In France, this reflected the end of the surplus wheat problem; in other northwestern countries it reflected the higher level of wheat prices in relation to prices of feed grains.

appears to have been larger than in any year since 1928-29. However, the aggregate increase in wheat disappearance in central and eastern Europe failed to offset the reduced feeding of wheat in northwestern Europe.

Heavier consumption of wheat in the *Danube countries* in 1936-37 was associated with bumper domestic wheat crops. Indeed, in view of the size of the 1936 crops, the increase in wheat utilization in the Danube basin appears quite moderate and in Rumania strikingly small. High international wheat prices stimulated Danubian exports and encouraged continued heavy use of corn for food in Rumania and Yugoslavia. Despite record wheat exports and increased consumption in 1936-37, substantial quantities of wheat were used to build up stocks in the Danubian countries.

In two of the three *chief exporting countries*—Argentina and Australia—domestic wheat utilization was apparently maintained or slightly increased in 1936-37 as compared with 1935-36 (see Table IX). But a substantial reduction is indicated for Canada, reflecting decreased feeding of merchantable wheat, smaller losses in cleaning, and reduced quantities of unmerchantable grain. In all three countries the net retention of wheat milled for flour was moderately higher in 1936-37; and in Argentina and Australia somewhat more wheat was used for seed. Disposition data (Table IX) suggest that standing official estimates of the Argentine crops of 1935 and 1936 may be about 5 million bushels too low.

Utilization of wheat in the *Orient ex-China* (India, Japan, Manchukuo, and Chosen) declined over 5 per cent between 1932-34 and 1935-37, mainly in reflection of reduced importation of wheat into Manchukuo. As compared with 1935-36, wheat consumption was apparently lower in 1936-37 in all four countries, where the high level of wheat prices and relatively lower prices for rice, barley, and various native foods were important factors.

In the *United States*, domestic utilization of wheat totaled almost 700 million bushels in 1936-37, a figure exceeded only in 1930-31, 1931-32, and 1932-33. As in the earlier years of heavy consumption, domestic supplies of feed grains were short, and large quantities of wheat were fed to livestock both on farms

where the wheat was grown and through commercial feed channels. In addition, larger quantities of wheat were used for seed and for milling for domestic retention in 1936-37 than in most other recent years.

As compared with figures carried previously, we now show slightly higher millings for domestic retention in the United States for the latest years, and correspondingly lower values for the balancing item. These changes result from revisions in our estimates of flour production and of wheat milled, in the light of data reported in the census of manufactures for 1935. The full series of revised estimates of monthly flour production and of net retention appear in Table VI. The differences from our earlier estimates are too small to be perceptible on a chart of monthly flour production, and are of interest chiefly in connection with appraisals of the trend of wheat and flour consumption. According to our earlier estimates, the annual consumption of flour in the United States declined from 176 pounds per capita in 1929 to 152 pounds in 1933-34 and had not increased perceptibly since then. It now appears that the decline in flour consumption stopped at about 153 pounds per capita, and that there has since been recovery to 155 or 156 pounds.¹

DEVELOPMENT OF 1937 CROPS

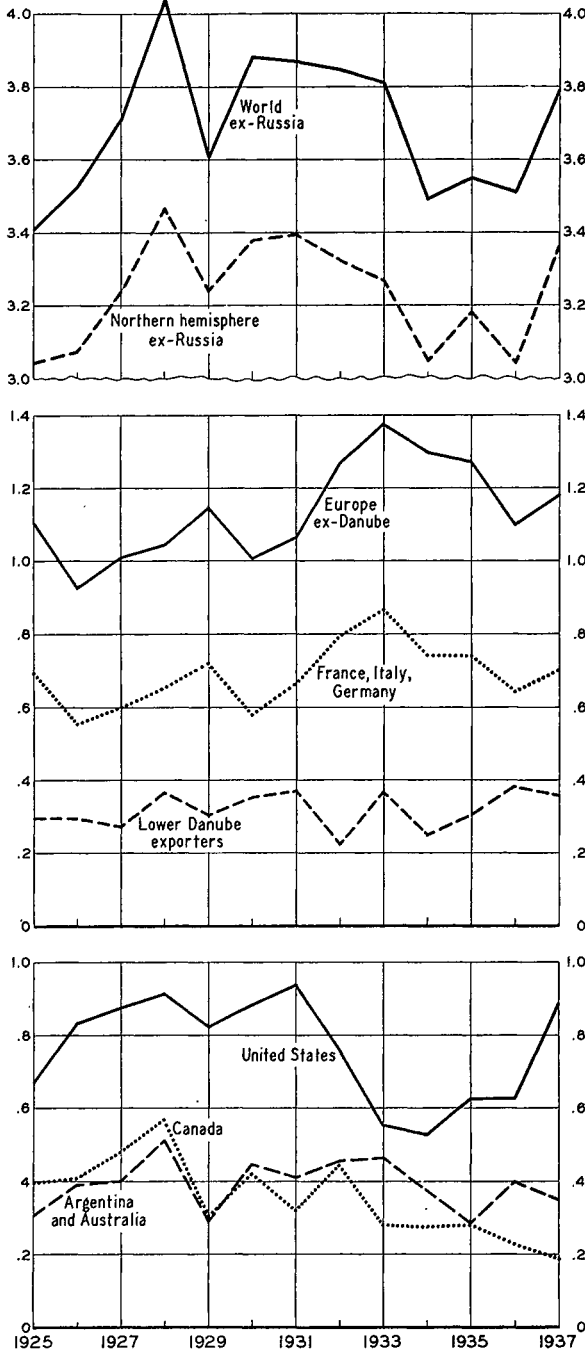
Despite the worst crop disaster ever recorded in Western Canada, Northern Hemisphere countries appear to have harvested a moderately large wheat crop this year (Chart 3). Now estimated at 3,371 million bushels, the Northern Hemisphere crop ex-Russia is approximately 325 million bushels larger than last year's short outturn and is the fourth largest on record. The sown acreage for the 1937 crop of the Northern Hemisphere was of record size, whereas the yield per sown acre appears to have been only average or somewhat below.

Because of the large Northern Hemisphere crop, and in spite of the present outlook for a reduced outturn of wheat in the Southern

¹ The bases for these estimates will be presented in our review of the crop year 1936-37, *WHEAT STUDIES*, December 1937.

Hemisphere, the world crop ex-Russia now seems likely to be about 290 million bushels

CHART 3.—PRINCIPAL WHEAT CROPS, 1925-37*
(Billion bushels)



* See Tables I and II, which contain some later revisions.

larger this year than last (Table I). Current estimates suggest that among the more im-

portant producing countries, Italy, Rumania, and Bulgaria obtained bumper wheat harvests in 1937, while among the less important producers, Greece, Finland, Tunis, and Japan probably secured crops of record size. The 1937 crop of the USSR is generally regarded as large, and we tentatively assume that it is about as large as that of 1935.

United States.—The United States winter-wheat crop, now estimated at 688 million bushels, is the third largest in the history of this country. Planted on an acreage of record size, the crop suffered fairly heavy damage from drought and cold weather. Despite an abandonment of 18 per cent, approximately 47.1 million acres of winter wheat remained for harvest—an area exceeded only in 1919.

From April 1 to June 1 the United States Department of Agriculture continued to forecast the average yield per acre of winter wheat at 13.7 to 13.8 bushels, practically the same as in 1936 and about 1.5 bushels below the fairly "normal" 1923-32 average yield. During June and July, however, the crop outlook improved moderately, and despite some late damage from rust, the indicated yield per acre as of August 1 was 14.6 bushels. Infestation of black stem rust in late June and early July affected yields and crop quality mainly in eastern Kansas and Nebraska and in the western part of the soft winter-wheat belt. In these areas particularly, test weight per bushel of wheat is extremely variable, with a substantial part of the soft winter-wheat crop now regarded as too light for satisfactory milling.

The area sown to spring wheat in the United States in 1937, 23.5 million acres, was also relatively large. Although slightly smaller than in 1936, it ranks as the fourth largest in postwar years. But persistent drought in the western portion of the belt and some rust infestation in the eastern portion resulted in heavier abandonment than usual; and the acreage indicated for harvest, 21.1 million acres, has been exceeded eight times since the war.

Drought, heat, and rust not only reduced the acreage but also lowered the yield and quality of the spring-wheat crop. As of September 1, the yield per harvested acre

was officially estimated at 9.4 bushels, or practically the same as in 1936 and about 24 per cent below the 1923-32 average. The crop, now estimated at 198 million bushels, is the largest since 1932, but some 40 million bushels smaller than the average for 1923-32.

The total United States wheat crop is currently estimated at 886 million bushels. This represents an increase of 260 million bushels as compared with the crop of 1936, an increase almost as large as that now indicated for the world ex-Russia. Not since 1931 has the United States harvested a crop of comparable size, and only twice in postwar years have larger outturns been secured.

Record heavy receipts of new-crop wheat at primary markets in the United States during July, and continued heavy receipts in August (Chart 4), bore witness not only to the large

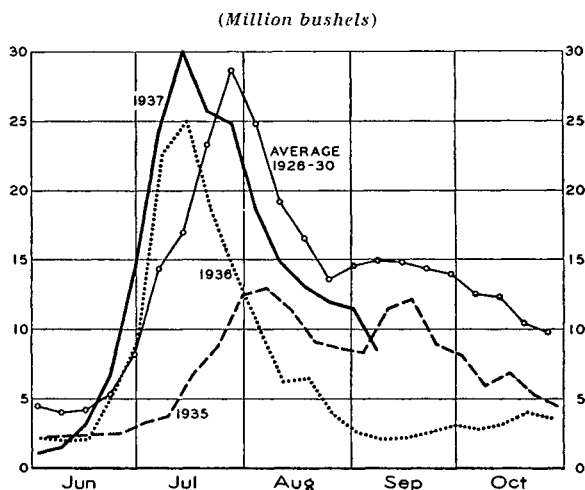
Early marketings suggest that the new soft red winter crop is unusually poor as regards test weight, and that the hard red spring crop will grade about as low as in 1935 and 1936. Although part of the hard winter crop is only mediocre or poor in quality, a larger portion is excellent: the average grade is somewhat higher than in either of the two preceding years, and much of the wheat is of high protein content. Through August, only 18 per cent of soft red winter inspections and 22 per cent of hard red spring inspections graded No. 2 or higher, whereas the corresponding percentage for hard winter wheat was 65.

Canada.—In mid-May it seemed reasonable to anticipate a Canadian wheat crop of 265-350 million bushels; but the actual outturn is now estimated at only 188 million. Drought, heat, and rust, which took heavy toll of the United States spring-wheat crop, were much more devastating in Canada.

In the Prairie Provinces, spring wheat was sown fairly early in 1937 on a moderately large acreage. Although soil-moisture conditions at planting time were far from reassuring, they did not preclude harvest of a good-sized crop. During May, however, precipitation was significantly below normal in Saskatchewan and Alberta, and on May 31 the condition of Canadian spring wheat was considerably below average. In June, acute and widespread drought in the two drier provinces resulted in "the most serious crop disaster in the Prairie Provinces ever to be recorded this early in the season."¹ The following month was characterized by further severe damage from heat and drought in Saskatchewan and Alberta; and the crop of Manitoba, which had previously been rated above average in condition, then suffered the first serious effects of drought and rust.

The development of the Canadian spring-wheat crop during May-July is indicated by the condition figures below, expressed as percentages of the corresponding long-time average yields of wheat per acre. Comparable data are presented for 1936, a year of somewhat similar severe damage from prolonged drought and heat. In the bottom row are

CHART 4.—WHEAT RECEIPTS AT PRIMARY MARKETS IN THE UNITED STATES, WEEKLY, JUNE-SEPTEMBER 1937, WITH COMPARISONS*



* Weekly data summarized by months in Table III. The thirteen markets covered are east of the Rockies.

size of the new winter-wheat crop, but also to relatively early harvesting and to the general satisfaction of farmers with prevailing prices. Reflecting the heavy marketings of new-crop wheat, United States visible supplies (and also world visibles) increased sharply during July-August (Chart 9, p. 21). Indeed, the increase in United States commercial stocks during July-August was the largest ever recorded.

¹ Dominion Bureau of Statistics, *Crop Report*, July 9, 1937, p. 1.

shown the standing official estimates of actual yields in 1936 and 1937, in bushels per acre.

Date	Canada		Manitoba		Saskatchewan		Alberta	
	1936	1937	1936	1937	1936	1937	1936	1937
Condition								
May 31	95	85	96	101	95	78	96	93
June 30	82	51	89	102	80	34	83	63
July 31	45	35	61	90	45	14	40	51
Yield ^a	8.7	6.8	10.9	18.5	8.0	2.5	9.1	9.7

^a For 1937, preliminary estimate published September 10.

For all Canada, the condition of spring wheat as of July 31, 1937 was the lowest on record (the records covering 30 years). In Manitoba, crop condition was then only a little below average, and even in Alberta it was moderately higher than the record-low figure for July 1936. But more than offsetting the somewhat better situation in these provinces was the almost incredibly low percentage condition (14 per cent) in Saskatchewan.

The total Canadian wheat crop of 1937, officially estimated in September at 188 million bushels, is the smallest harvested since 1914 when the acreage was less than half as large. Indeed, the indicated yield per acre in 1937, 7.4 bushels, is almost certainly the lowest secured in more than half a century of Canadian wheat production.

In general quality, the new Canadian crop is probably somewhat inferior to the unusually excellent crop of 1936. The percentage of inspections grading No. 2 and above will presumably be lower this year, reflecting an increased proportion of light-weight grain. In protein content, the 1937 crop will probably rank reasonably high, but below the excellent crop of 1936. Not only was the average percentage of protein higher in 1936 than in any year of the preceding decade, but the distribution of the 1937 crop among the three Prairie Provinces (small crops in Alberta and Saskatchewan and a fairly good crop in Manitoba) also suggests a lowering of average protein content this year.

Europe ex-Russia.—Current estimates of European wheat crops indicate an aggregate outturn in Europe ex-Russia only moderately larger in 1937 than in 1936, with increases in

importing countries more than offsetting a small reduction in the Danube basin. Excessive rains and low temperatures in the winter and early spring of 1936–37 were unfavorable for early crop development, and as of May 1, the average condition of the principal European crops was mediocre or below average. Warmer, drier weather in May and early June improved the general outlook, but by mid-June complaints of drought were issuing from parts of central and eastern Europe. Subsequent rains restored the good appearance of eastern crops, but throughout central Europe the crops continued to be regarded as relatively poor until threshing returns in August indicated higher yields than had been anticipated. Excellent harvesting weather, particularly in central Europe, was partly responsible for the improvement in German and Austrian crops; and this influence may later be reflected in upward revision of several other crop estimates.

In southwestern Europe, where notably short crops were harvested in 1936, the aggregate outturn was increased this year by substantially larger crops in Italy and (probably) Spain. But a small crop in France kept the total outturn for the region slightly below the 1930–35 average. Current crop estimates for these countries are presented below, in million bushels, with comparisons:

Country	1930–35 av.	1936	1937
France	302	256	246 ^a
Italy	258	225	294
Spain, Portugal	177	130	162 ^a
Total	737	611	702

^a Estimates for France and Spain by the Foreign Agricultural Service of the U.S. Department of Agriculture.

This year the range of French private crop estimates has been unusually wide, and the final official estimate may differ considerably from the one here given. Moreover, most private crop estimates for Italy have been below the preliminary official figure of 294 million bushels; if changed, this figure will presumably be reduced. In any case, the quality of the new Italian crop is admittedly low as judged by weight per hectoliter and by moisture content. In France, on the other hand,

the 1937 crop is said to be distinctly superior to that of 1936 with respect to test weight.

The smaller wheat producers of northern Europe (the British Isles, Netherlands, Belgium, Scandinavia, and the Baltic countries) harvested wheat crops somewhat above average size this year, and, except in Belgium and the Netherlands, moderately larger than in 1936. In total, the new crops of these countries are now estimated at 156 million bushels, as compared with 153 million in 1936 and an average of 140 million in 1930-35 (see Table II).

In central Europe, Germany and Austria are now reported to have secured crops of about the same size as in 1936; but estimates for Czechoslovakia and Poland still indicate reduced outturns this year. Standing estimates, shown below in million bushels, indicate a considerably larger crop for Germany than was anticipated even in mid-August.

Country	1930-35 av.	1936	1937
Germany	170	162	158
Poland	74	78	66
Czechoslovakia	55	56	50
Austria	13	14	14 ^a
Total	312	310	288

^a Estimate of the Foreign Agricultural Service of the U.S. Department of Agriculture.

While the total Danubian wheat crop is estimated to be about 25 million bushels smaller this year than in 1936, it is substantially above rather than below average, ranking as the fifth largest on record. In mid-June a much smaller outturn was expected, because of the anticipated damage from prolonged heat and drought, but rains and reduced temperatures during the latter part of June considerably improved the outlook. Current estimates of the Danubian crops (official, except for Yugoslavia) are given below in million bushels.

Country	1930-35 av.	1936	1937
Hungary	78	88	70
Yugoslavia	78	107	86 ^a
Rumania	102	129	136
Bulgaria	52	59	64
Total	310	383	356

^a Estimate of the Foreign Agricultural Service of the U.S. Department of Agriculture.

The 1937 crops of Rumania and Bulgaria are estimated to be the largest ever harvested. In contrast, Yugoslavia and Hungary obtained considerably smaller outturns in 1937 than in 1936; and Hungary's new crop is even below the 1930-35 average. In trade circles it seems to be generally expected that the standing official crop estimate for Hungary will later be revised upward.

Other Northern Hemisphere.—In northern Africa, the aggregate 1937 wheat crop of Morocco, Algeria, and Tunis is now estimated to be somewhat below average but materially larger than last year's short outturn (Table I). Again this year, drought was the principal factor responsible for the reduced yields. Morocco suffered most severely and current estimates suggest that her 1937 crop is next to the smallest harvested within the past 15 years. Algeria felt some of the effects of drought, but less than areas farther west; her crop is now estimated to be of about average size. Tunis was favored by reasonably adequate rains, and appears to have a record crop. Egypt, whose wheat culture rests mainly upon irrigation, secured a large harvest from a relatively small planted area.

Still farther to the east, Syria and Lebanon, Palestine, and Turkey are reported to have secured good-sized wheat crops this year as a result of precipitation average or better during the spring. Private approximations of the new Turkish crop vary considerably. The foreign representative of the United States Department of Agriculture reports an estimate above the notably high figure for 1936, whereas the latest published information from the International Institute of Agriculture suggests that this year's crop is smaller than last year's. The comparability of the 1936 crop estimate for Turkey with estimates for earlier years remains an open question (see p. 6).

In the Orient, 1937 wheat crops are generally large except in China, whose production is not included in our total for the "world ex-Russia." India's crop, now estimated at 366 million bushels, ranks as one of the largest in postwar years; and Japan and Chosen are both credited with crops of about record size. In Manchukuo, the outturn of wheat this year is said to be somewhat larger than in 1936,

but slightly below the average for 1930-35. In China, prolonged drought in the fall and winter considerably reduced sowings and lowered the average yield of wheat; but the small size of this crop will probably have little influence upon the world wheat situation.

For Russia no official or semi-official crop estimate is available for either 1936 or 1937. The area "planned" for the 1937 wheat crop was 6 million acres larger than that "planned" for the crop of 1936, but the actual increase in the sowings of both wheat and rye was apparently only 1 to 2 million acres. Thus, if the wheat acreage was increased by more than 1 to 2 million acres, such additional increase was at the expense of the rye acreage. Despite the relatively small increase in planted acreage, Russia presumably harvested a considerably larger bread-grain crop in 1937 than in 1936. Weather conditions, particularly during the critical month of June, were much more favorable this year; and for several months reports from impartial observers in Russia have continually stressed the excellent appearance and (later) the indicated high yields of the new wheat and rye crops. Partially offsetting this optimistic view is official recognition of excessive harvesting losses, based partly upon delay in harvesting and partly upon bad harvesting weather in certain important areas. Had it not been for these losses, we should have put our tentative approximation of the 1937 harvested crop moderately higher than our approximation of the harvested crop of 1935 (based on the official estimate for 1935 with allowance for moderate harvesting losses), but under existing circumstances it seems reasonable to take for a working hypothesis an estimate for 1937 practically equal to that of 1935. The implication of this estimate for international trade is discussed on pp. 21-22.

Southern Hemisphere.—The outturn of the new Southern Hemisphere crops cannot yet be reliably predicted, but certain inferences may be drawn from available information on planted acreage and early crop development. The acreage sown to wheat for grain in Australia has been officially estimated at 13.5 million acres, an increase of 11 per cent over the estimated area sown in 1936 and the larg-

est acreage since 1933. In contrast, only a slight expansion of sown acreage is indicated for Argentina by the recent official estimate of 17.6 million acres.

Despite these indicated increases in planted acreage, the present outlook is for a smaller crop in the Southern Hemisphere in 1937 than in 1936. In Australia, persistent dry weather from early June to mid-August was unfavorable for wheat in important areas of New South Wales, Victoria, and Western Australia; but widespread rains after mid-August substantially improved the outlook for crops in all of these states. In Argentina, prolonged drought in Santa Fe and Cordoba resulted in fairly heavy abandonment of sown acreage; and in late September the condition of wheat in these areas and in the Pampa was fair to poor. In the province of Buenos Aires, however, a good-sized crop is still anticipated.

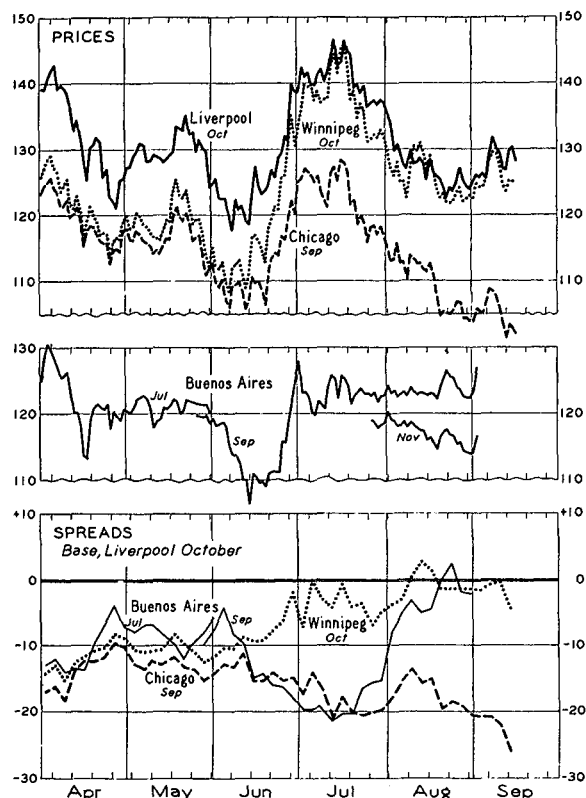
The United States Department of Agriculture now forecasts the Australian and Argentine crops at 155 and 205 million bushels, respectively. These forecasts suggest an average yield in Australia, a yield below average in Argentina. In our later summary of "world" wheat supplies and our discussion of the outlook for international trade in 1937-38, we accept these forecasts as reasonable current approximations of the principal Southern Hemisphere crops. But the crucial period for these crops lies in the next few weeks. For other Southern Hemisphere countries we include in our "world" totals an allowance of 75 million bushels, a little above the aggregate estimate of these crops in 1936, but below the corresponding figure for 1935.

PRICES AND SPREADS

International wheat price movements during May-September were influenced by two largely independent sets of developments: those related to the balance of supplies and requirements through July, and those related to prospects for the new crop year. In Liverpool the near-supply position was the dominant price influence to mid-June. Changing new-crop prospects were responsible, through response to North American price movements, for some prominent fluctuations in Liverpool

prices prior to the last day of May, and were responsible for about half of the price decline in the October future from the end of May to mid-June (Chart 5).

CHART 5.—WHEAT FUTURES PRICES AND SPREADS,
FROM APRIL 1937*
(U.S. cents per bushel)



* Closing prices, chiefly from *Daily Trade Bulletin*, Chicago; *Grain Trade News*, Winnipeg; *London Grain, Seed and Oil Reporter*; and *Revista Oficial*, Buenos Aires. Conversions at noon cable transfer rates of exchange in New York. Spreads, Tuesday and Friday closing quotations in relation to Liverpool opening prices next morning.

Until the final days of May, prices of new-crop futures at Chicago and Winnipeg were kept above the lows of April by the strength in Liverpool prices. The North American markets were nevertheless relatively weak during most of May under the influence of prospects for increased crops. Prices at Chicago moved toward an export basis on the September future, and the Winnipeg October future suffered a similar relative decline in anticipation of reduced premiums on Canadian wheat during 1937-38. In the North American markets, price fluctuations induced by changing indi-

cations of new-crop prospects were much wider than at Liverpool. When, however, Liverpool weakened sharply in early June on easing of the near-supply position, the North American markets resisted this further price-depressing influence.

Progressive easing of the near-supply position was an important price influence throughout June, manifested in a progressive decline of premiums on cash wheat and the near future at Liverpool. By the end of June the price of the July future had fallen slightly below that of the October, completing a relative decline of over 10 cents a bushel during the month (Chart 7). From mid-June, however, sensational crop damage in Canada became the dominant price factor until the middle of July. Then ensued a typical reaction from the excessive price advance of the crop-scare period.

At Buenos Aires, prices were out of line for exports to Europe throughout the period under review. Until early June they fluctuated around \$1.20 a bushel. Price declines in other markets, threatening competition of other wheats in Brazil—the only importer still drawing on Argentine supplies in significant volume—forced a sharp decline of Buenos Aires prices to mid-June. With the subsequent price advance in other markets, Buenos Aires rose also, but only until the end of June. Thereafter prices of the September future oscillated through a narrowing range around a level of \$1.23 a bushel until it advanced temporarily in late August and again at the beginning of September. Apparently this future was receiving artificial support of some kind, for the November future was priced about 4 cents lower even in late July, and in August declined in sympathy with other markets while the price of the September future remained unaffected.

The supply position through July.—Since wheat supplies may be nearly as short for 1937-38 as they were for 1936-37, it is especially pertinent to ask whether the high wheat prices of March-May appear in retrospect to have been warranted by the supply position. It will be recalled that old-crop futures and basic cash wheats in Liverpool, Winnipeg, and Chicago were generally 10 or 15 cents higher

than prices of the new-crop futures shown in Chart 5.

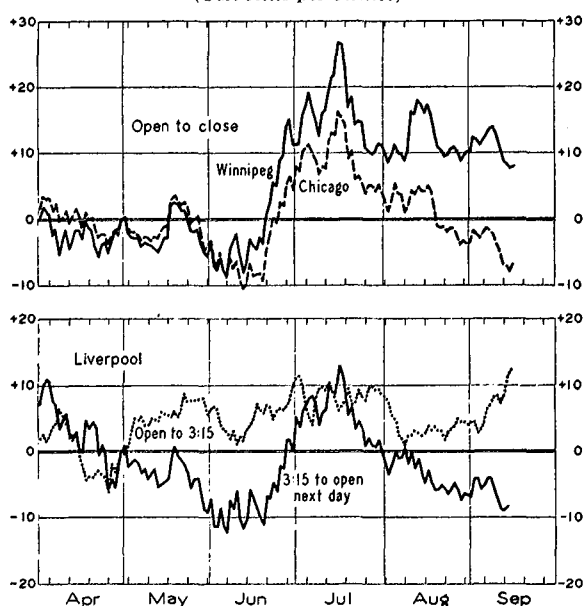
Superficially, the course of wheat prices indicates a broad decline from early April to mid-June, when the Canadian crop-scare reversed the trend; and encourages the interpretation that prices had been much higher than the supply situation warranted. Much of the price decline to mid-June must be attributed to developing prospects for a bumper crop of winter wheat in the United States coupled with conditions that admitted the possibility of an excellent spring-wheat crop in North America.

The old-crop supply position was continuously tight through May. British importers watched with concern the cessation of Argentine exports to Europe and the heavy diversions of wheat to Germany, and debated whether the quantities remaining from the rapidly diminishing world shipments would suffice to meet requirements of the United Kingdom and other importers during July and August. As the harvesting of a large winter-wheat crop in the United States became certain and prices of the July future at Chicago fell to an export basis, the availability of liberal supplies from the United States during August was assured. Concern then centered on the adequacy of other supplies to suffice importers through July. Finally at the beginning of June the continuation of abnormally heavy shipments from the Danube and from Australia allayed fears of stringency. Shippers encountered difficulty in disposing of Australian cargoes afloat. Cash prices and the July future at Liverpool began to weaken, and during June declined about 10 cents relative to the October future.

The price influences of these developments bearing on the near-supply position appear most clearly in certain changes recorded in Charts 6 and 7. Although the premium of No. 1 Manitoba over the October future declined during May, premiums on other qualities of wheat remained generally firm through April and May (Chart 7). The Liverpool July future at the beginning of June was at a premium of 11 cents over the October—approximately its maximum for the season. Then in June a rapid and progressive weakening of

cash premiums ensued which continued through the month, uninterrupted by the sharp turn in the general course of prices at the middle of June. By the end of June the near future at Liverpool had fallen fractionally below the price of the October future, and Indian wheat was selling a cent or two below the October future.

CHART 6.—CUMULATED INTERVAL PRICE CHANGES IN LIVERPOOL, CHICAGO, AND WINNIPEG FUTURES, FROM APRIL 1937*
(U.S. cents per bushel)

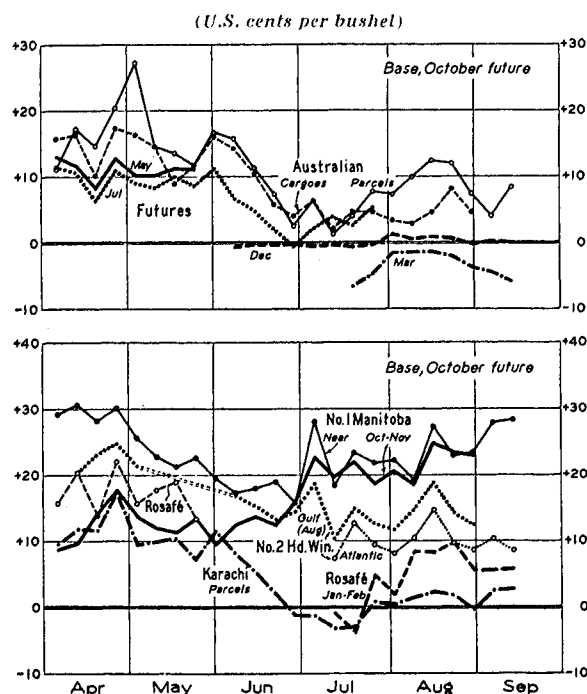


* Price changes daily in October futures (September for Chicago), based on quotations for Chicago and Liverpool chiefly from *Daily Trade Bulletin*; for Winnipeg, from *Grain Trade News*. The curves as plotted represent progressive summations of price changes over the designated intervals to and from May 1.

Liverpool futures prices from late April to the end of May were consistently strong except as they responded to price declines in North American markets. The price changes initiated by Liverpool are shown by the dotted line in the lower section of Chart 6, representing a cumulation of price changes in Liverpool each day from the opening of the market to 3:15 p.m. (From 3:15 p.m. until its close at 4:30, as in the changes overnight, Liverpool prices tend to respond chiefly to developments in North American markets.) This trend shows the Liverpool market to have led the strong upward price movement

from April 26 to May 5. The net price advance of 10 cents at Liverpool in the eight trading days was almost wholly attributable to strength originating in that market. The chief influences were heavy German buying of wheat, expectations that it would continue, and the practical cessation of Argentine wheat shipments to Europe.

CHART 7.—BRITISH WHEAT PRICE SPREADS, FROM APRIL 1937*



* Tuesday opening prices of Liverpool futures and sellers' quotations, from Broomhall's *Corn Trade News* and direct cables. The sellers' quotations, unless otherwise specified, are c.i.f., for parcels afloat or for early shipment, and generally to Liverpool. On non-Empire wheats, duty has been added. On No. 2 Hard Winter, the latest quotations are for shipment in September.

Until the final day of May, Liverpool prices during its session to 3:15 remained generally firm or strong. The Liverpool price recessions to mid-May and again during May 20–29 were entirely in response to weakness in North American markets, shown by the curves of cumulated session changes in the upper section of Chart 6 and reflected by the Liverpool price changes from 3:15 to the opening next morning, shown by the solid line in the lower section of the chart. Finally on May 31, and more particularly during June 3–10, Liverpool exhibited pronounced independent weakness.

Prices and crop developments.—All the conspicuous price movements on crop developments during May–July arose predominantly from changes in crop prospects in the United States and Canada, and were led by price changes originating in North American markets. Until May 13 the winter-wheat crop in the United States progressed well, on the whole, and prices at Chicago and Winnipeg declined despite the relative strength at Liverpool. During May 13–19 continued drought in the dry areas of the southwestern United States and in Canada aroused concern. With opinions of traders unsettled after the wide price movements of the two months preceding, the price response in North America was strong. There ensued good rains over most of the spring-wheat region of North America and in the Southwest, and prices reacted sharply.

With the beginning of the second week of June, the threatening situations in the spring-wheat region of the United States, and more particularly in Canada, began to exert an active influence on wheat markets. Prices in North American markets turned up in the face of the recently-developed weakness at Liverpool. Over the week end of June 13 it became apparent that serious damage to the Canadian crop was in prospect and prices in all markets started a sharp advance. Fears were felt also for spring wheat in the United States. It was suffering from drought, although not so seriously as the Canadian crop, and was threatened also by rust, which had damaged winter wheat in the central portions of the United States.

The spring-wheat crop of the United States eventually turned out fairly well, but in Canada the crop deteriorated almost steadily to the end of August. The estimated condition of spring wheat declined from 85 per cent as of May 31 to 35 per cent as of July 31 (see p. 10). The Winnipeg October future advanced 40 cents from the low in June to the high on July 17, while the Liverpool October future advanced 30 cents and the Chicago September, 25 cents.

Substantial deterioration of the Canadian crop occurred during the latter half of July and spring wheat in the United States suffered

somewhat from drought and rust. Once reaction was well under way from the previous excessive price advances, however, news of further crop damage served merely as a mild deterrent to the rapid price decline.

Price decline to August 23.—The decline of wheat prices during the five weeks from July 17 to August 23 was remarkable chiefly for its rapidity. That wheat prices would soon decline after having exceeded \$1.40 a bushel in early July for the Liverpool October future, and nearly as high a price for the Winnipeg October, was almost a certainty. These were prices only about 10 cents a bushel below the peaks for the 1936–37 crop year, reached near the end of the season. On the worst interpretation of Canadian crop conditions, world wheat supplies for 1937–38 could not be viewed as likely to be much smaller than supplies had been for 1936–37. It was incredible that with a similar volume of supplies, prices could be maintained throughout 1937–38 at levels close to the highest reached temporarily on a sharp advance during 1936–37.

Precisely how much of a price advance was warranted by the crop developments of June and July it is impossible to determine. That the advance should have been excessive was wholly natural, for the crop damage was as sensational as any within many years. In times of such extreme developments it is difficult at best to maintain balanced judgments; and the price movements of the previous three months had been such as to unsettle the basis for price judgments of traders. Recognizing this situation in May, we had noted that “a rapid price advance of 20–30 cents, from whatever level might have been reached at its beginning, could easily develop from threats of serious spring-wheat crop damage.”¹ That the serious threats would actually occur could of course not be known in advance, though the existence of unusually hazardous conditions for the spring-wheat crop had long been evident.

Commonly in the past, after such an advance as occurred during June–July, wheat

prices have receded during the next few months to not far from the level from which the rise started. Only under rather exceptional conditions, such as obtained in the summer of 1936, have prices held for long at close to the peak of a large and rapid price rise. Usually, however, the decline has extended over considerably more than six weeks, except when the initial rise has come early in the season and the subsequent decline has been accelerated by much favorable crop news. As of mid-September it is not certain that price reaction may not shortly be resumed, but present indications are that it terminated on August 23.

A noteworthy feature of the price decline of July 17–August 23 is the fact that, except for a brief interval, it was led entirely by North American markets. Only during July 28–August 9 did Liverpool initiate substantial and repeated declines during its market sessions to 3:15 (Chart 6). In this period the weakness contributed by Liverpool was severe. Commenting on the period, Broomhall remarked: “Generally all shippers, with the exception of Indian, have shown more inclination to come to terms with buyers. First-hand prices of Indian are 1/6 per quarter [about 4⁵/₈ cents per bushel] above resellers’ quotations.”²

August 24 to mid-September.—From August 24 the trend of prices of wheat futures in Liverpool and Winnipeg turned upward, while at Chicago prices continued to decline, although at a more moderate rate than during the previous five weeks. Crop news from Argentina and Australia and developments in the European political situation played important parts in the daily price fluctuations, but the net price changes from August 24 to mid-September were determined mainly by other forces.

The immediate influence behind the strength at Liverpool was the relatively high level at which shippers’ offers were held. During the price decline from mid-July, prices of Australian and Indian wheats not already shipped, and of Argentine wheat for January–February shipment, had declined considerably less than prices of Liverpool futures, leaving them at abnormal premiums over the October fu-

¹ WHEAT STUDIES, May 1937, XIII, 399.

² Corn Trade News, Aug. 11, 1937.

ture. Some parcels and cargoes afloat were sold in late August at prices between 5 and 10 cents under those being asked for later shipments; but as the supply of this distressed wheat diminished and shippers continued to hold for higher prices on new shipments, prices of near-by wheat and of the Liverpool futures strengthened. The comparatively high level of prices of United States wheats was one of the influences contributing to the advance in Liverpool.

Meanwhile, the continued absence of large-scale buying of wheat for export from the United States was a price-depressing influence there. Prices at Chicago and in other markets of the United States worked gradually lower toward a basis at which exports on a large scale could be effected.

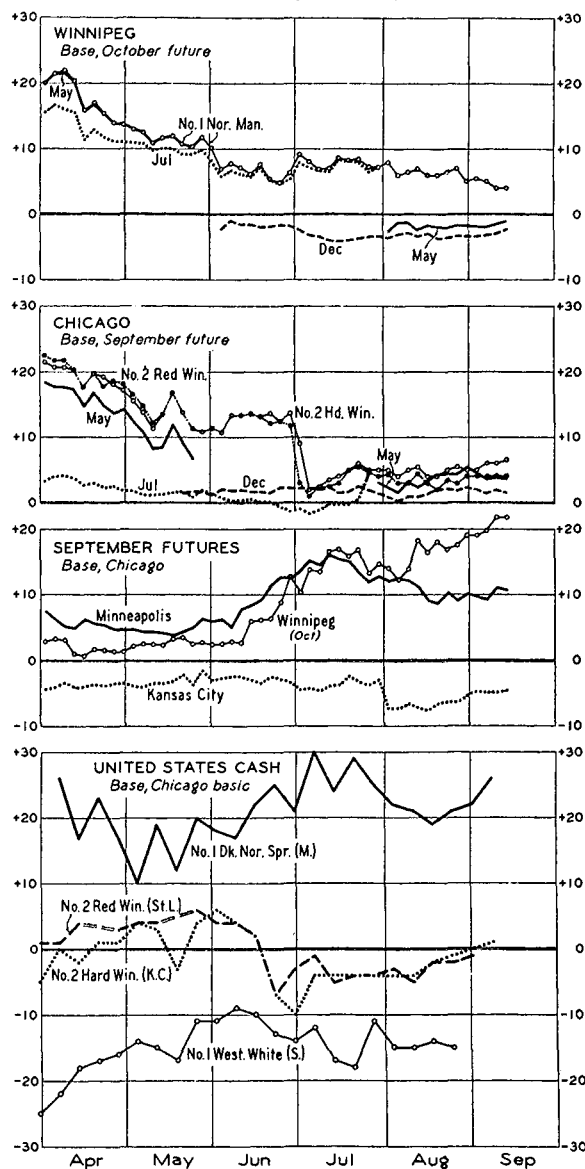
Price spreads.—During the closing weeks of the 1936–37 season, as we have seen (p. 14), developments in the international supply position were well reflected in the stability of the premium of the Liverpool July future at about 10 cents over the October until the beginning of June, and the rapid loss of this premium during June (Chart 7). At Winnipeg, the premium of July wheat over the October followed a slightly different course, in that it declined from 16 to 11 cents during April, and during June dropped only about 5 cents, chiefly at the beginning of the month (Chart 8). At Chicago, cash wheat and the old-crop future (May) weakened during May, while during June quotations on the cheapest No. 2 Hard Winter and No. 2 Red Winter wheat held at 12–14 cents over the September future. These premiums were quickly lost at the beginning of July, influenced by fairly early and extraordinarily rapid marketing of new winter wheat. At Kansas City and St. Louis, premiums on cash wheat had declined more than a week earlier.

The progress of the crops, and their extraordinary deterioration in Canada particularly, led to some important changes in price relations to meet the new situation in prospect for 1937–38. Serious concern over the outlook for spring wheat in both Canada and the United States began to reflect itself in price relations by the end of May. Between late May and early July the Winnipeg new-crop future

rose about 10 cents relative to the October future at Liverpool (Chart 5). At first Chicago shared the relative strength of Winnipeg,

CHART 8.—NORTH AMERICAN WHEAT PRICE SPREADS, FROM APRIL 1937*

(U.S. cents per bushel)



* See notes to Chart 5 and Table X. Tuesday and Friday prices, except North American cash, which are weekly averages.

partly owing to fears for spring wheat in the United States; but this relative strength of Chicago lasted only about two weeks. From mid-July, Winnipeg lost ground relative to

Liverpool; then showed relative strength, especially during July 28—August 9 when Liverpool was leading the price decline; and finally in latter August attained a temporarily stable relation to Liverpool, with the Winnipeg October future 1 to 2 cents under the Liverpool.

In the British parcels market, quotations on No. 1 Manitoba for October/November shipment followed the same general course as the Winnipeg October future, advancing from a premium of 10–12 cents a bushel over the Liverpool October future in May to premiums that ranged rather widely in the vicinity of 22 cents. This relative advance of about 10 cents in the parcels quotations on new-crop shipments occurred mostly in late June and the first days of July (Chart 7).

At Minneapolis, the concern for spring-wheat prospects advanced the price of the September future from a premium of about 4 cents a bushel over Chicago September in mid-May to a premium of 15 cents over Chicago in early July (Chart 8). Some improvement in crop conditions, and perhaps a growing impression that the previous rise had been somewhat excessive, led to gradual reduction of this premium to slightly under 10 cents by mid-August.

An inconspicuous but noteworthy indication of market expectations for 1937–38 was given by the spread between the October and the March futures at Liverpool. The March future was first quoted on July 17 at nearly 7 cents under the October, but the discount narrowed to only about 1 cent by August 5. This discount reflected little expectation of easing of the international supply position after harvest of the Southern Hemisphere crops. The discount on the March future gradually widened again to nearly 6 cents in mid-September, at which level it was about the same as the corresponding spread in September 1936. Prices of Argentine wheat for January–February shipment followed a course broadly similar to that of the March future.

The view that the United States would resume exportation in substantial volume during 1937–38 has been widely held since last spring. But price relations have only approached the spreads necessary for active exportation without quite attaining them. During most of May

the new-crop futures at Chicago were at a sufficient discount under the Liverpool July future to permit some export sales, but only in such limited quantities as importers felt could be disposed of at premiums comparable with that currently ruling on the Liverpool July future. When premiums on near-by wheat declined in Liverpool, Chicago prices moved slowly toward a discount under the Liverpool October future that would permit exportation (Chart 5). Finally, about mid-September, the spread between Chicago and Liverpool widened rapidly, promising early development of an active export business for the United States.

In the British parcels market, No. 2 Hard Winter for August shipment from Gulf ports was quoted during May and June at prices which, with duty added, were equivalent to only 1 to 5 cents less than quotations on near shipments of No. 1 Manitoba (Chart 7). In July this discount increased to about 10 cents, and in early September to nearly 15 cents. No. 2 Hard Winter wheat from Atlantic ports, averaging poorer in quality than the Texas and Oklahoma wheat shipped through Gulf ports, was quoted 3 to 5 cents a bushel cheaper. At these prices, hard winter wheat from the United States was at no time attractive to British buyers. In continental countries, where it competed without the disadvantage of a 6-cent preferential duty, it was bought in limited quantities.

There is a restricted market for No. 2 Hard Winter wheat in importing markets as a direct substitute for the higher grades of Manitoba. In general, however, it is not an adequate substitute for the better grades of northern spring wheat for the blending purposes for which the spring wheat can command high premiums. No. 2 Hard Winter wheat apparently cannot be sold in large quantities in import markets except at prices close to those of other standard wheats.

Changes in the discount of No. 1 Western White wheat under Chicago basic cash wheat (Chart 8) reflect in the main a failure of Pacific Coast prices to follow the full movement at Chicago on the main swings in prices. At the large price discounts of early April, fairly heavy export sales were made. Two sales were

reported shortly after the middle of May, and then none until August. Some sales could doubtless have been made in July except for the scarcity of wheat. With Seattle prices only 15 cents under Chicago in August, small amounts of Baart wheat were sold for shipment from eastern Washington to Minneapolis; but the aggregate possibilities for rail shipments to the east were very limited. Sales for shipment by water to Gulf or Atlantic ports were reported as impossible.

The Kansas City September future was held fairly high relative to the Chicago September except during August, owing to the anticipated and subsequently realized discounts of soft winter wheat (deliverable at Chicago but not at Kansas City) under hard winter of the same grades. Rust damage to soft winter wheat just before harvest reduced the crop somewhat below earlier expectations and reduced greatly the proportion of the crop heavy enough to grade No. 2 or better. No. 2 Red Winter accordingly did not fall to as great a discount under hard winter as might reasonably have been expected from the outlook in May. At the beginning of August, the Kansas City September future declined sharply to about 7 cents under the Chicago September. The freight cost of shipping wheat by barge from Kansas City to Chicago was about 5¼ cents a bushel. The large discounts that had developed on wheat of low test weight led to the expectation of delivery of No. 3 Hard Winter on the Kansas City September future despite the penalty of 3 cents a bushel. At Chicago, where no grade below No. 2 is now tenderable on contracts, difficulty was being encountered in getting enough heavy wheat for mixing purposes to provide an adequate supply of No. 2 winter wheats for delivery.¹

Scarcity of vessel space from Gulf ports and comparatively high freight charges have tended to restrict export sales for shipment by that route and to favor movement by way of Chicago and the Great Lakes. Prices on hard wheat at Chicago have tended accordingly to remain at or near a full shipping difference over prices of the same wheat at Kansas City.

¹ *Southwestern Miller*, Aug. 3, 1937, p. 27.

SUPPLIES AVAILABLE FOR 1937-38

Stocks of old-crop wheat.—As of about August 1, 1937, "world" stocks of old-crop wheat were smaller than in any of the preceding sixteen years for which estimates are available, though only 25 million bushels smaller than in 1925. Our preliminary estimate of 505 million bushels for 1937 (just a little above our May forecast) represents a reduction of some 270 million bushels as compared with the revised figure for 1936. These and other significant comparisons are shown below, in million bushels:

Position	1923-27 av.	1925	1936	1937	
				May fore- cast	Now Indi- cated
United States ^a	117	108	138 ^b	90	91
U.S. in Canada ^a	1	3	0	0	0
Canada	39	28	108 ^b	35	33
Canadian in U.S.	3 ^c	3 ^c	19	4	4
Australia	31	28	43 ^b	35	35
Argentina	65	58	65	60	55
Lower Danube ^d	37	20	25	34	35
French North Africa ^e	13	11	13	4	6
India	46	51	36	29	29
Total	352	310	447	291	288
Europe ex-Danube	193	170	286 ^f	154	173
Japan and Egypt.....	13	8	10	10	10
Afloat to Europe.....	40	33	21	23	26
Afloat to ex-Europe.....	7	6	11	7	8
Total	253	217	328	194	217
Grand total	605	527	775	485	505

^a As of July 1. In 1936 and 1937, exclusive of new-crop wheat included in reported stocks (see Table V).

^b Revised in accordance with revised official figures.

^c Exclusive of certain transit stocks covered by later figures; underestimation probably amounts to at least 2 million bushels.

^d Hungary, Yugoslavia, Bulgaria, Rumania.

^e Morocco, Algeria, Tunis.

^f Revised upward by 40 million bushels; mainly in reflection of our extensive revisions of stocks figures for France (see below, p. 20).

The estimated distribution of year-end stocks in 1937 differs but little from our forecast of mid-May. The only important discrepancy is the higher level of stocks now estimated for Europe ex-Danube. As of August 1, port stocks in the United Kingdom, Netherlands, and Belgium were moderately large, suggesting that total stocks in these

countries were not so low as we had anticipated. The widely circulated estimate (presumably from the Grain Monopoly) of 11 million bushels for Czechoslovakian wheat stocks was substantially lower than our May forecast; but this decrease was more than offset by the increase in our approximation of French stocks.

Small French imports in 1936-37 demonstrated that the domestic wheat supplies of France for 1936-37, and presumably for several earlier years, were considerably larger than standing official crop and stocks data indicated. Tentatively we are inclined to accept the official crop estimates for all years except 1932¹ and to assume that the carryover estimates for 1933-36 (currently attributed to the Minister of Agriculture) regularly understated the size of existing stocks by 35-40 million bushels. On the basis of these assumptions we have revised wheat carryover and consumption estimates for France from 1927-28.²

A somewhat similar revision of carryover estimates was undertaken for Czechoslovakia,² partly on the basis of new crop approximations for 1920-25 and 1928 presented in a publication of the Ministry of Agriculture of Czechoslovakia,³ and partly on the basis of recent flour production data. We think it is

now reasonably clear that the reports on the Monopoly wheat stocks as of July 1, 1934 and 1935 were not complete estimates of carryover, though the estimate for 1935 was more nearly complete than that of the preceding year. By 1936, however, the Monopoly stocks were perhaps only 2-3 million bushels smaller than the total wheat carryover in Czechoslovakia. These inferences, upon which our revised stocks estimates are based, will be tested by wheat trade and consumption developments over the next few years.

Although "world" wheat stocks as of about August 1, 1937 were the smallest recorded during 17 postwar years, in the Danube countries and Australia stocks were practically of average (1923-27) size and considerably larger than in 1925. Year-end stocks in Canada, Europe ex-Danube, and afloat to Europe were strikingly low, but in one or more earlier years still lower stocks had been indicated for each of these positions. Within Europe ex-Danube, August 1 stocks were probably everywhere below average except in Czechoslovakia. Among the principal producing areas, only the United States and Argentina appear to have reduced old-crop stocks to the lowest levels since 1920.

The United States carryover of old-crop wheat on July 1 was only 91 million bushels, practically 10 million smaller than the previous low carryover of 1926. The comparability of these figures, however, is somewhat open to question, since the 1926 stocks are taken as originally reported whereas the 1937 carryover is equal to the total reported stocks (103 million bushels) minus an estimated 12 million bushels of new-crop wheat in visible positions and in city mills.⁴ There is little question that the quantity of new-crop wheat included in the reported July 1 stocks was this year considerably larger than usual; but in some past years also some deduction should perhaps have been made to cover new-crop grain. In 1937, commercial stocks and stocks in country mills and elevators in the United States were lower than in any of the 15 preceding years; but stocks in city mills were about as large as in 1935 and 1936 and substantially larger than in any year prior to 1929 (Table V).

¹ For the 1932 crop we accept, for purposes of consumption and stocks calculations, the estimate of 363.8 million bushels proposed by L. D. Mallory, foreign representative of the U.S. Department of Agriculture at Paris. Our revised stocks estimates for 1932-35 also rest heavily upon information published by Mr. Mallory; see "An Appraisal of Recent French Wheat Policy," *Foreign Agriculture*, June 1937, I, 263-298.

² Below are shown both the original and revised carryover estimates for France and Czechoslovakia, for ten years, in million bushels:

Year	France		Czechoslovakia	
	Original	Revised	Original	Revised
1927	34	..	5.7	6.2
1928	22	25	7.5	9.2
1929	39	41	8.7	10.5
1930	49	52	7.4	10.0
1931	17	..	8.0	11.0
1932	27	30	6.8	11.8
1933	57	95	5.7	13.8
1934	95	133	11.5	23.8
1935	73	111	12.0	21.0
1936	40	78	25.0	28.5

³ Edvard Reich, *Zaklady Organizace Zemedelstvi Ceskoslovenske Republiky* (Praha 1934), p. 252.

⁴ A similar adjustment for new-crop wheat was made in the reported stocks figure for 1936.

As compared with several recent years, governmental agencies in various countries were unimportant holders of wheat on August 1, 1937. A year earlier the Canadian Wheat Board still held title to about 85 million bushels of wheat; the Argentine Grain Regulating Board was said to control approximately 17 million bushels; and the Czechoslovakian Grain Monopoly had on hand about 25 million from former crops. By the end of 1936-37 the holdings of the Canadian and Argentine boards had been liquidated and the Czechoslovakian Monopoly had apparently reduced its stocks to 11 million bushels. Even in the Danube countries, where wheat carryovers were presumably increased during 1936-37, the quantity of old-crop wheat in the hands of government agencies on August 1, 1937 was probably very small and significantly smaller than in 1936.

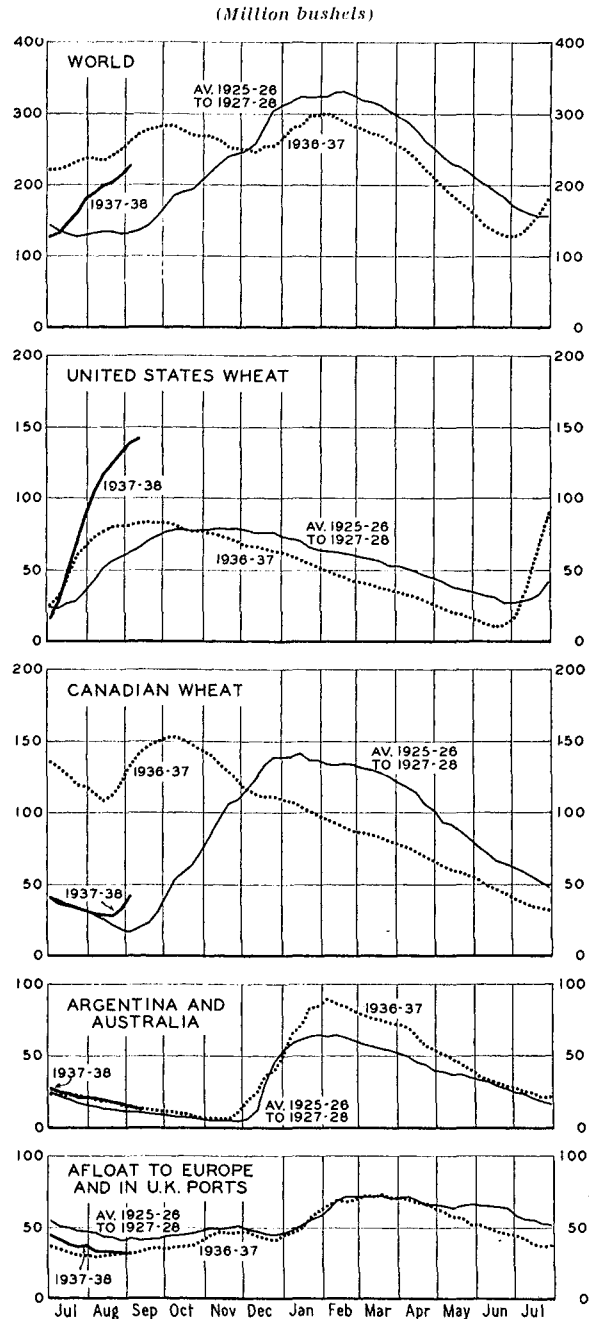
World *visible supplies* of wheat, like "total world" stocks, were notably low on August 1, 1937; but they were less strikingly low as compared with earlier years than were "total" stocks (Chart 9). Not only had world visibles as of August 1 been smaller in 1925, but they had also been smaller in 1926 and 1927. In all three earlier years commercial supplies of wheat declined between July 1 and August 1, whereas in 1937 these supplies increased 52 million bushels during July in reflection of record heavy marketings of new-crop wheat in the United States (Chart 4, p. 9). Except in the United States, visible stocks on August 1, 1937 were close to their corresponding average levels in 1925-27.

Total available supplies.—If the carryover of old-crop wheat into 1937-38 approximates 505 million bushels and the new world crop ex-Russia totals 3,806 million bushels (as now indicated), the wheat supplies available from crop and carryover in 1937-38 will be about the same as in 1936-37. But the large Russian crop just harvested may be expected to contribute heavier exports this year, making total wheat supplies for the world ex-Russia a little larger than in 1936-37.

The actual size of Russian exports is still a matter of conjecture. Even if it were definitely known that the Russian wheat crop of 1937 is equal to the 1935 crop, there would

be no assurance that Russian wheat exports would be as large in 1937-38 as in 1935-36.

CHART 9.—VISIBLE WHEAT SUPPLIES, WEEKLY FROM JULY 1937, WITH COMPARISONS*



* Weekly data for certain series summarized by months in Table IV.

The population of the USSR has presumably increased about 3 per cent since 1935-36; the

Soviet government's need of foreign exchange is presumably less urgent now; domestic bread-grain crops were notably short in 1936, with consequent heavy reduction of stocks in 1936-37; and the current political situation in Europe is such as to encourage rebuilding of Russian grain stocks whenever circumstances permit. Finally, it appears significant that in spite of heavier early grain collections by the government in 1937 than in 1935, Russian shipments through the third week of September were slightly smaller this year than in 1935. On the basis of these considerations, we tentatively forecast Russian net exports in 1937-38 at 25 million bushels.

The total wheat supplies likely to be available to the world ex-Russia in 1937-38 are shown below, with comparisons for past years, in million bushels:

Year	Initial stocks	Crop ^a	USSR exports	Total supplies	Disappearance ^b
1924-25..	684	3,165	... ^c	3,849	3,322
1925-26..	527	3,408	27	3,962	3,348
1926-27..	614	3,523	50	4,187	3,540
1927-28..	647	3,705	2	4,354	3,656
1928-29..	697	4,038	... ^c	4,735	3,777
1929-30..	958	3,607	9	4,574	3,659
1930-31..	915	3,881	114	4,910	3,908
1931-32..	1,002	3,868	65	4,935	3,928
1932-33..	1,007	3,844	17	4,868	3,738
1933-34..	1,130	3,810	34	4,974	3,774
1934-35..	1,200	3,492	2	4,694	3,742
1935-36..	952	3,550	29	4,531	3,756
1936-37..	775	3,515	4	4,294	3,789
1937-38..	505	3,806	25 ^d	4,336	.....

^a See Tables I and II.

^b Utilization within the "world ex-Russia" plus small and variable net exports to areas outside it.

^c Net imports.

^d Forecast.

In general distribution, as well as in total size, the world wheat supplies of 1937-38 closely resemble those of 1936-37.¹ European importing countries, with a larger crop this year, again have a moderate aggregate supply of domestic wheats (perhaps even smaller than in 1936-37); the four chief exporting countries as a group now seem likely to have about the same small quantity of wheat available this year as last; and the Danube countries and Turkey again appear to be favored with exceptionally large supplies.²

In spite of these broad similarities, various

important details of distribution stand out in sharp contrast. Within importing Europe, for instance, the domestic wheat supplies of 1936-37 were most notably short in Italy, Greece, and perhaps Germany, whereas this year the striking shortages are in Germany and France. Moreover, among the four chief exporting nations, the country which had relatively the smallest supplies last year (the United States) this year has the largest supplies, while the one which had relatively the largest supplies last year (Argentina) seems likely to have the smallest in 1937-38.

These and other differences in the detailed distribution of the available wheat supplies of 1936-37 and 1937-38 are important in their influence upon international trade, wheat consumption, and carryovers. The next two sections, in which we present our preliminary forecasts of trade and year-end stocks in 1937-38, are based upon analysis of the wheat positions of individual countries and therefore take into account the distribution of available supplies as well as their absolute quantity.

OUTLOOK FOR TRADE

Import requirements.—To forecast the volume of international trade in wheat in 1937-38, it is necessary to determine the prospective import requirements of both European and non-European countries. This can be accomplished only by detailed analysis of the wheat positions of individual countries, with the accuracy of the results depending primarily upon the accuracy of current estimates of crops and carryovers and upon

¹ Crops and carryovers in the principal producing areas appear to be distributed as follows in 1937-38, with comparisons, in million bushels:

Year	Europe ex-Danube	North America	Argentina, Australia	Lower Danube ^a	French North Africa ^b	India	Turkey ^c
1932-33.....	1,457	1,707	570	271	82	388	60
1933-34.....	1,054	1,424	593	394	77	382	98
1934-35.....	1,672	1,270	577	303	103	381	100
1935-36.....	1,618	1,268	428	322	88	392	98
1936-37.....	1,385	1,101	506	408	93	388	138
1937-38 ^d	1,353	1,108	450	392	77	395	140

^a Hungary, Bulgaria, Rumania, Yugoslavia.

^b Morocco, Algeria, Tunis.

^c Crop only.

^d Crops partly estimated (see Tables I and II).

² It is probable that Turkey has a large carryover this year in addition to her large new crop.

correct prediction of the influence of governmental controls.

In *Europe*, there is a group of countries whose net imports and/or domestic utilization of wheat vary little from year to year, and whose import requirements for 1937-38 can therefore be estimated with only a small margin of possible error. This group includes the Netherlands, Belgium, Switzerland, Portugal, Austria, the Irish Free State, Norway, and Finland. On the basis of current crop estimates and on the assumption that wheat prices will continue high relative to prices of feed grains, we forecast the net imports of these eight countries at 116 million bushels in 1937-38, as compared with 113 million in 1936-37. Small increases in net imports are to be expected in the Netherlands, Portugal, and the Irish Free State.

Greece, the United Kingdom, and Denmark could well be included with the above group of countries were it not that preliminary crop estimates for Greece, and estimates and forecasts of carryover for the United Kingdom and Denmark, are often considerably in error. Because of these considerations, and because utilization of wheat for feed varies more in the United Kingdom and Denmark than in Belgium and the Netherlands, the average margin of error in forecasts of trade for this second group of countries is somewhat greater than for the group previously considered.

Underlying our forecasts of net imports into the United Kingdom, Denmark, and Greece in 1937-38 are three basic assumptions: (1) that the amount of wheat used for feed in these countries will be as small in 1937-38 as in 1936-37; (2) that British wheat stocks will not be increased this year, despite various proposals for the accumulation of sizable reserves against the possibility of war; and (3) that the final estimate of the Greek crop will approximate 29 million bushels, rather than the preliminary official figure of 37 million. On these assumptions, the net imports of this second group of countries may be expected to total about 223 million bushels in 1937-38, or 4 million less than last year when the Greek crop was notably poor. This forecast implies a reduction of 6-7 million

bushels in the net imports of Greece, and an increase of about 4 million bushels in the net imports of the United Kingdom.

A third group of European countries is one whose members have recently been just on the margin of importation and exportation—the three Baltic countries, Sweden, Czechoslovakia, and Poland. In 1936-37, net exports from Czechoslovakia and Poland (14 million bushels in the aggregate) were considerably larger than the total net imports of the three Baltic states and Sweden (about 2 million bushels). If standing crop estimates for these countries are reasonably accurate, there is no basis for anticipating more than one or two million bushels of net exports (largely from Sweden) during 1937-38; and net imports may be expected to be equally small.

Three of the remaining four countries of Europe ex-Danube, France, Germany, and Italy, have long been regarded as major problems in trade forecasting. For these countries, trade forecasts for past years have been characterized by frequent relatively large errors, and there appears to be little prospect that errors of estimation in 1937-38 will be unusually small. The fourth country, Spain, ranks with this group in the current crop year only because of the abnormal conditions of civil warfare supported on both sides by other nations. In 1936-37 Spain apparently imported net about 15 million bushels of wheat. This year, her net imports may be larger or smaller, depending upon the size and availability of domestic wheat supplies, the course of her civil strife or its possible termination, and the amount of aid forthcoming from other countries. In the absence of knowledge of any of these factors, we place our guess on the probable size of Spanish net imports in 1937-38 at 10 million bushels, a little less than indicated for last year.

The present wheat supply situation in France is not clearly defined. It is now known that recent official "carryover" estimates for that country have been far from complete and that the crop of 1932 was seriously underestimated. Whether some other recent crops have also been placed too low in the official estimates, or whether earlier crops were

placed too high is not clear; nor is the recent course of wheat consumption in France definitely established. If, as some current estimates suggest, the French crop of 1937 approximated 246 million bushels and stocks of old-crop wheat stood 10-25 million bushels above a minimum figure on about August 1, 1937, available domestic supplies of wheat would total 256-271 million bushels. Such supplies would be decidedly inadequate to meet domestic requirements of around 29 million bushels for seed and either 290 million bushels for food (indicated by some past-year comparisons) or even the lower and more widely accepted food estimate of 275 million bushels. Such figures suggest that France will require net imports of at least 33 million bushels, and perhaps as much as 65 million in 1937-38, even if carryover stocks are reduced to a minimum in 1938. But to offset such calculations there are the assertions of capable French observers that France will not require this year net imports significantly larger than she can obtain from her North African dependencies (roughly 15 million bushels). The indicated range of possible French net imports in 1937-38 thus seems to be 15-65 million bushels. At present, however, we are inclined not to put much faith in estimates close to either the higher or lower limit of this range, but rather to accept for our own forecast a figure around 30 million bushels.

For Germany, unlike France, the current wheat supply position is fairly well known. Yet two important questions remain: (1) what influence (in terms of million bushels of wheat) will government controls have upon German wheat consumption and imports? and (2) to what extent will wheat stocks be rebuilt during 1937-38? We are of the opinion that recent Nazi regulations forbidding the use of wheat or rye for feed will be generally effective as regards wheat; and that the quantity of wheat used for human food will be moderately reduced from 1936-37 by regulations providing for the admixture of maize meal and potato flour with wheat flour, and by strict controls over the types of flour milled and over the types and age of bread sold in bakeries. Yet it scarcely seems reasonable to

believe that these various measures will reduce wheat utilization in Germany by more than 17 million bushels or 10 per cent as compared with last year, when similar measures were in force during most of January-July. This implies a forecast of about 30 million bushels for German net imports in 1937-38.

Italy, which was the largest Continental importer of wheat in 1936-37, this year promises to rank among the smaller importers. The Italian crop of 1937, if correctly estimated at 294 million bushels, is one of the largest on record and large enough to cover domestic requirements for seed and food. But commercial estimates of the crop are lower than the official estimate; the quality of the new wheat is admittedly inferior; and the Italian government has long been anxious to build up some "security stocks" of wheat. Under these conditions, it seems reasonable to believe that Italy may import net this year around 10 million bushels of wheat.

Below are summarized our forecasts of the net imports of European net importing countries in 1937-38, with comparisons, in million bushels.

Country	1930-35 average	1936-37 reported	1937-38 forecast
British Isles	239	212	216
Netherlands, Belgium, Switzerland, Austria ...	102	89	89
France	38 ^a	9	30
Germany	14 ^a	32	30
Italy	29	57	10
Spain, Portugal ^a	4	15	12
Scandinavia, Baltic ^a	32	20	18
Poland, Czechoslovakia ^a ..	11	.. ^b	0
Greece	18	21	15
Total ^a	478	455	420

^a Without deduction of any net exports.

^b Net exports from both countries.

The net imports of *ex-Europe* may be expected to be about 16 million bushels smaller in 1937-38 than in 1936-37. The United States, which imported net about 17 million bushels of wheat last year, will this year resume her customary position as a net exporter; and if prices remain high, other non-European countries will probably take about the same small aggregate quantities of foreign wheat as they did in 1936-37. The prospective effect of the

Sino-Japanese conflict upon Oriental imports is not clear. At present, however, we are inclined to assume that Japanese net imports of wheat will be maintained at or slightly above their level in 1936-37 (in spite of a larger crop this year), and that Chinese net imports will not be further reduced even in the face of an attempted naval blockade.

Last year, *stocks* of Canadian wheat in the United States were drawn down 15 million bushels, and stocks afloat were increased only 5 million. Thus, some 10 million bushels of wheat went to meet the requirements of importers without being reflected in the net-export statistics for 1936-37. On August 1, 1937 Canadian stocks in the United States and United States stocks in Canada were both close to minimum levels, and stocks afloat totaled only about 26 million bushels. Consequently, there is no prospect this year that import requirements can be significantly met through further reduction of stocks that have passed export boundaries. On the other hand, there is little reason to suppose that such stocks will be materially increased during the course of 1937-38, since the international wheat-supply position is again relatively tight, and June and July exports from distant countries (such as India and Australia) will probably not be significantly larger in 1938 than in 1937.

If our forecasts of European and non-European import requirements in 1937-38 are approximately correct, and if stocks afloat and in comparable positions are about the same at the end as at the beginning of the crop year, *world net exports* of wheat may be expected to approximate 550 million bushels. This implies that the unpredictable difference between total net exports and the total calculable demand will be about equal to the average for 1932-33 to 1936-37 (see p. 5). Our summarized trade forecast for 1937-38 is shown below, in comparison with reported figures (partly preliminary) for 1936-37, in million bushels:

Year	Euro- pean Imports	Non- Euro- pean Imports	Change in stocks	Total demand	Total net exports	Dif- fer- ence
1936-37	455	126	-10	571	605	34
1937-38	420	110	0	530	550	20

Sources of net exports.—World net exports of 550 million bushels in 1937-38 may now be expected to be supplied about as follows, in million bushels, with comparisons:

Country	1930-35 average	1936-37	1937-38
United States	59 ^a	...	130
Canada	217	195	80
Australia	131	102	95
Argentina	145	162	105
Lower Danube ^c	39	89	73
USSR	46	4	25
Fr. North Africa ^d	21	6	15
India, Turkey	3	24	18
Others ^e	11	23	9
Total	672	605	550

^a Not deducting net imports in 1934-35.

^b Net imports.

^c Hungary, Yugoslavia, Rumania, Bulgaria.

^d Morocco, Algeria, Tunis.

^e Including in different years various countries of Europe, Iraq, Syria, Uruguay, Chile, and South Africa.

Estimated net exports of 95 million bushels from Australia and 105 million from Argentina in 1937-38 rest upon current prospects for crops of 155 and 205 million bushels, respectively, in these two countries (Table IX). If these crops should turn out to be considerably larger than is now anticipated, our forecast of Southern Hemisphere exports would be correspondingly increased; on the other hand, smaller crops would be associated with smaller exports.

Of the Danubian countries, Rumania will be the largest exporter, probably supplying slightly over half of the estimated Danubian exports. Hungary and Yugoslavia will ship considerably smaller quantities of wheat this year than last, their expected total exports scarcely exceeding those of Yugoslavia alone in 1936-37.

On the basis of current crop approximations for the countries of northern Africa, Algeria and Tunis may be expected to contribute about average wheat exports in 1937-38, whereas Morocco seems likely to ship very little.

Turkey, with a reported bumper wheat crop and probably a large carryover from last year, will perhaps export more wheat than in any other year since the war. On admittedly insecure evidence, we tentatively forecast the

net exports at 7-8 million bushels, several million larger than in 1936-37.

For India, August-July exports are drawn partly from the wheat crop of the current year and partly from the next year's crop harvested in March-May. Since the size of the next wheat crop is never predictable in September, and since later price relationships between wheat and native food grains are important in determining the quantity of wheat exported, early forecasts of Indian exports may be significantly in error. Our present forecast of 10 million bushels for Indian net exports in August-July 1937-38 (9 million less than in 1936-37) may therefore be considerably revised in later months.

Canadian net exports of 80 million bushels in 1937-38 would be by far the smallest in postwar years. Yet such exports would leave the domestic wheat carryover at about the same low figure as in 1937. It may be recalled that the agreements of Great Britain with Canada, Australia, and India arising out of the Ottawa Conference provided "that the duty on foreign wheat in grain, . . . as provided in this agreement, may be removed if at any time Empire producers of wheat in grain . . . are unable or unwilling to offer [it] on first sale in the United Kingdom at prices not exceeding the world prices and in quantities sufficient to supply the requirements of the United Kingdom consumers." According to any logical method of figuring it now appears that Empire countries will not have this year wheat "in quantities sufficient to supply the [total] requirements of the United Kingdom consumers." Under these circumstances, will the preferential duty of 6s. per quarter on non-Empire wheats be suspended during 1937-38? As yet no such action has been taken; and in view of the strong opposition from Canada and Australia that such action would probably call forth, we do not now feel justified in assuming that any significant change will be made.

This year the United States has exportable supplies of wheat larger than she will presumably be called upon to export (Table IX). She is thus in a position to meet whatever import requirements other countries do not meet. If world net exports actually total 550 million

bushels, and other countries supply the quantities we have indicated, the United States will be called upon to export 130 million bushels. If world net exports are larger or smaller than 550 million, or if other countries supply less or more than is now anticipated, the balance will presumably be effected by larger or smaller net exports from the United States. Through mid-September 1937 United States exports have been notably small, particularly with reference to a prospective crop-year total as large as 130 million bushels; but during October-July exports from this country may well be proportionally heavier than usual.

Translation of our forecast of world net exports into terms of Broomhall's shipments (for which current data are available weekly) can be only approximate. On the average, but not consistently from year to year, reported world shipments run about 20 million bushels less than total net exports. On the basis of this average relationship, our forecast of 550 million bushels for net exports in 1937-38 may be said to suggest world shipments of 530 million bushels, or about 34 million more than is indicated by Broomhall's forecast published August 18. This forecast differs from ours mainly in estimation of European import requirements. For France and the British Isles particularly he suggests smaller increases in prospective imports than we anticipate; while for Greece he suggests a larger reduction and for Italy a smaller reduction than are implied by our forecasts.

OUTLOOK FOR 1938 CARRYOVERS

During the current crop year, disappearance of wheat in the world ex-Russia will presumably be slightly lower than in 1936-37, mainly as a result of reduced feeding of wheat in the United States and of curtailed consumption for food and feed in Germany. In other countries changes in wheat utilization will probably be small; and shipments to areas outside the world ex-Russia are expected to differ little from those of last year.

In the United States, the quantity of wheat milled for domestic retention during July-June 1937-38 is now forecast at 480 million bushels as compared with 471 million in

1936-37. The indicated increase of 9 million bushels provides for an anticipated expansion of 5 million bushels in domestic consumption (chiefly reflecting increase in population) and allows 4 million bushels to cover an expected small increase in the quantity of wheat milled per barrel of flour.¹ Seed use of wheat may be somewhat reduced by restrictive requirements introduced into the soil-conservation program for 1938 (of which advance notice was given in mid-August) or perhaps by other measures not yet adopted; but we tentatively assume that about the same quantity of wheat will be used for seed this year as last.

In contrast, the amount of wheat used for feed in the United States will presumably be reduced in 1937-38. The supply of feed grains per consuming animal unit is far larger this year than last, above the average for 1928-32, and about as large as in 1926-27, 1928-29, 1932-33, and 1935-36.² For these years the United States Department of Agriculture has estimated "wheat fed on farms of wheat growers" at 34, 57, 125, and 83 million bushels, respectively. The highest figure, 125 million, was the estimate for 1932-33 when wheat prices were very low in absolute terms though not in relation to corn prices. In contrast with 1932-33, only 93 million bushels of wheat were reported to have been fed on farms in 1936-37 when wheat prices were absolutely much higher but relatively much lower, and when the supply of feed grains per animal unit was much smaller than in any year of the preceding decade except 1934-35. On the basis of these considerations, and because December corn futures at Chicago and Kansas City have recently been selling about 40 cents below December wheat futures as compared with only about 15 cents last year, we anticipate that not over 70 million bushels of wheat will be fed on growers' farms during

July-June 1937-38, despite availability of sizable quantities of low-quality soft red wheats and price relationships generally favorable for wheat-feeding during the first two or three months of the crop year.

In 1936-37 domestic wheat utilization exceeded the quantities used for milling, seed, and feed on growers' farms by 36 million bushels—a figure which covers the wheat used for commercial feeds and miscellaneous industrial purposes and also the net errors in estimation of the 1936 crop, 1936 and 1937 carryovers, and the three items of disposition mentioned above. The "residual" for 1936-37 was relatively high, and higher than we anticipate for 1937-38. In Appendix Table IX, neither the estimates for wheat fed on farms nor the "residual" figures are shown separately,³ but are combined under the "balancing item." For 1937-38 we expect this item to be lower than in 1936-37 by about 35 million bushels.

If, as we now anticipate, domestic wheat utilization in the United States approximates 670 million bushels this year (roughly 25 million less than in 1936-37), 308 million bushels will remain for exportation and carryover. Our forecast of 130 million bushels for August-July net exports from the United States probably implies a July-June export figure in the neighborhood of 120-125 million bushels. On the basis of this calculation, domestic stocks as of July 1, 1938 would total about 185 million bushels, or 95 million more than a year earlier. However, the stocks of 1938 might differ materially from this figure if our forecasts of world exports and/or of the aggregate exportable supplies of other countries should prove not to be well-founded.

For Canada, Argentina, and Australia, our current estimates of crop-year supplies, domestic utilization, and exports (Table IX) do not suggest material changes in year-end stocks in 1938. In all of these countries, wheat stocks were notably low as of August 1, 1937 and they may be expected to be only a little larger at the end of the present crop year.

On the basis of preliminary crop estimates, we judge that 1938 carryovers in Europe ex-Danube, Northern Africa, the Orient, and afloat to Europe and to ex-Europe will also

¹ Wheat requirements per barrel will be high, but probably will not contrast strongly with those of 1936-37, which were also comparatively high.

² Statement based on data of the U.S. Department of Agriculture, *The Feed Grain Situation*, August 26, 1937, and *General Crop Report as of September 1, 1937*.

³ These will be given in our review of the crop year to be published in December.

be about the same as in 1937. Within Europe ex-Danube, small increases in stocks in certain countries (most notably in Italy) will probably be about offset by reductions elsewhere (particularly in France, the United Kingdom, and Czechoslovakia). But in the Danube basin, there seems likely to be a net reduction of about 10 million bushels in carryovers that may partly offset the large indicated increase in the United States. If, contrary to our expectations, European countries other than Italy should build up sizable "security stocks" of wheat during 1937-38, European stocks would be materially larger in 1938 than in 1937; but the carryover of the United States would probably be almost correspondingly reduced below our present forecast.

In view of present uncertainties as to the size of 1937 crops in many countries, "world" year-end stocks in 1938 can now be forecast only in terms of a fairly wide range, say 555 to 605 million bushels. This forecast implies an increase of 50-100 million bushels as compared with the level of world stocks in 1937, and may be interpreted as indicating an easier world wheat supply position this year than last.

OUTLOOK FOR PRICES

Price levels.—From the standpoint of price prospects, the outstanding features of the wheat situation as of about September 20 are that world supplies appear to be in the comfortable position about midway between shortage and troublesome surplus, and that the price structure recently attained seems about in line with this supply situation. There seems to be no present ground for anticipating either an upward or a downward trend of wheat prices during October-December. Crop developments in the Southern Hemisphere, information on Russian exports, and revisions of crop estimates will more or less alter the appearance of the supply position during the next few months; but unless indicated supplies are reduced by 50 million bushels or more in relation to prospective requirements, or increased by an even larger amount, the supply position will remain relatively easy, yet without presenting a burdensome surplus.

In these circumstances, price fluctuations

from day to day may for a time continue fairly large, in consequence of wide differences of opinion which still prevail regarding the prices warranted by the supply position, but such price changes will tend to be followed by reaction. News affecting the appearance of the supply position will tend to have rather less than its usual sustained effect on prices. Evidence of crop damage in the Southern Hemisphere, unless cumulative and extreme, would probably have little more price influence than corresponding evidence of crop improvement.

The general business situation during October-December may prove more than usually critical in determining the course of wheat prices. No large changes are to be expected on that account; but with the wheat situation itself offering no strong incentive to price change, wheat may tend to follow other commodities rather than to lead in price movements during October-December.

Judged in terms of total "world" supplies, the wheat position for 1937-38 might be interpreted as fairly tight, differing only slightly from that of last year. Judged in terms of prospective world carryover at the end of the year, which takes account of the probability of reduced consumption in certain countries, the wheat position appears less tight, but scarcely easy. Only in 1925 and 1937, among postwar years, has world carryover fallen within or below the range of our present forecast of carryover for 1938. But judged in terms of prospective carryover in the United States, at 185 million bushels, the wheat situation for 1937-38 appears distinctly easy.

The prospect of a fairly large carryover in the United States in the face of low carryovers elsewhere at the end of 1937-38 arises from a variety of circumstances that differ from country to country. These will tend in most regions to induce maintenance of small year-end stocks even though prices should stand at levels moderate to low. "World" wheat supplies will be more completely available for consumption during the crop year than usual, without the inducement of high prices to draw them out. This circumstance, reflected in the forecast of United States carryover, must be taken into account in appraising the supply position.

Important elements in the calculations leading to the estimate of United States carryover are the suppositions that: (1) European countries will not accumulate unusual stocks and in several instances will reduce consumption, either in consequence of national financial considerations and shortage of domestic supplies or through reduced use of wheat for feed; (2) the Danube countries will export freely, leaving themselves only moderate supplies for consumption and carryover; (3) Canada will reduce her year-end carryover about to a minimum in consequence of an extraordinarily short crop and high premiums for Canadian wheat; and (4) Argentina and Australia will hold on August 1 only such relatively small stocks as are usually carried at that season following the harvest of average or small crops. An early decline of prices to fairly low levels would call for alteration of some of these assumptions, with consequent moderate reduction in the indicated carryover for the United States; but a price decline deferred until spring might have little effect on United States exports and carryover.

Changes in the supply position that might result in reducing prospective United States carryover to 135 million bushels, 50 million below our present estimate, would still leave supplies quite adequate. Changes that would raise the prospective carryover to 250 million bushels, or perhaps more, would not strain carrying capacity in the United States, nor lead necessarily to anticipation of a price-depressing surplus. In short, the supply position appears to be one from which substantial quantitative change could occur in either direction without greatly altering the price outlook.

With importers dependent in large degree on the United States for wheat supplies during 1937-38 the Chicago market may occupy a dominant position in determining international wheat prices, at least until Southern Hemisphere crops become available. The record of Chicago prices in past years comparable with the present as regards prospective carryover affords a useful guide to price judgments. For such a comparison, it is necessary to take account of changes in the general wholesale price level. The following tabulation gives the

pertinent data for all years during 1896-1917 and 1921-1937 in which the United States carryover fell within the range 130-280 million bushels. The prices shown are adjusted ("deflated") to the basis of a wholesale price level equal to that of September 1937.

United States carryover out ^a	Price of May future in December, deflated ^b	Year
130	121	1901-02
130	112	1912-13
132	104	1922-23
134	115	1900-01
137	96	1923-24
138	105	1935-36
140	125	1905-06
148	113	1934-35
175	107	1895-96
188	106	1899-00
192	105	1906-07
196	120	1898-99
226	140	1915-16
228	109	1928-29
274	104	1933-34

^a In million bushels; for 1896-1922, estimates of the Food Research Institute, *WHEAT STUDIES*, February 1928, IV, 180; for 1923-1937, estimates of the U.S. Department of Agriculture, chiefly from *World Wheat Prospects*, October 1936, p. 9.

^b Average price, in cents per bushel, divided by the Bureau of Labor Statistics index number of wholesale prices converted to the base, September 1937 = 100.

The foregoing record shows prices of the Chicago May future ranging up to \$1.25, on the adjusted basis, in years when the carryover was only slightly over 130 million bushels. Otherwise the only fairly high prices in December were recorded in 1898-99 and 1915-16, both years of distinctly abnormal circumstances. There is apparent a marked concentration of the prices within the range of \$1.04-\$1.09, including both prewar years and recent years.

Supplies affording a carryover in excess of about 130 million bushels in the United States can be carried logically only at a price level offering reasonable prospect of profit from holding the surplus into the succeeding year. Presumably the prices recorded in the foregoing table were such as seemed at the time to offer such prospect. Will price prospects be similarly appraised in the present season? Considerations bearing on that appraisal will have major importance in determining wheat

prices during the next few months. Movements to September 20 may be interpreted as indicating that wheat prices have reached a position of fairly stable equilibrium. During the week preceding September 20 the price range for the Chicago May future was \$1.04½–\$1.08¾, with the price moving through most of this range on several individual days, as it did on September 20 also, when it varied from \$1.04¾ to \$1.07. Since the levels reached appear in normal relation to the supply position, they may hold with little sustained change through December. If a sustained price change of as much as 5–10 cents occurs, it is more likely to be upward than downward, forced by strong holding of wheat in the United States.

Price spreads.—Wheat price relations between exporting markets and Liverpool have recently been affected by advances in ocean freight charges, especially on the North Atlantic.¹ The volume of wheat movement in prospect is moderate, with much of it on the shorter routes, but gradual recovery in general international trade and the recent withdrawal of much Japanese shipping from normal commerce have notably strengthened the freight market. The recent advances in grain freights may have put them in a position which can be held without much change during the next few months.

At present freight rates, Chicago prices seem still slightly too high relative to Liverpool to permit active exporting. The spread between the Chicago and Liverpool December futures may widen slightly to near 30 cents. During August–December, importers seem

likely to require about 35 million bushels of wheat and flour from the United States. To reach this total, United States exports during October–December must average about 2 million bushels a week—approximately double the average rate during August and the first half of September. Presumably about half of this will go to the British Isles.

Between the Winnipeg and Liverpool December futures, the price spread may remain near 6 cents, or narrow somewhat to mid-November. Thereafter, it will depend largely on the adequacy of near-by wheat supplies for British needs through December. Recent large premiums of No. 1 Manitoba over other wheats in the British market appear not unreasonable in view of the shortage of hard spring wheats, and competition among millers for the limited supplies may result in even higher premiums during the winter or spring. Such an advance in premiums, if it occurs, would tend to increase the price of the Winnipeg May future relative to the Liverpool March.

In all the principal markets, prices of cash wheat and of the near futures are currently in a fairly high position relative to the more distant futures. This reflects a tendency toward firm holding of cash wheat which may continue until December or longer. The Liverpool December future, recently about 6 cents above the March, may go to a somewhat larger premium, especially if crop prospects in the Southern Hemisphere should improve. In Chicago, the July future may sell at a discount under the May—possibly at a discount of as much as 4 or 5 cents. Such a discount would seem illogical in connection with prospects for a liberal carryover at the end of the crop year, but so long as the occurrence of an excess carryover appears open to question there may be a strong tendency for traders to expect lower prices in July than in May.

¹ Broomhall reports chartering of space from New York on September 16 at the equivalent of 11 cents a bushel, and from the Gulf at 19 cents a bushel, while on the previous day a charter was reported from Montreal at 14 cents a bushel—all sharply above the averages for August.

The authors of this study have relied heavily, in interpretation of the current Russian wheat situation, on information and opinions of V. P. Timoshenko. The tables were prepared by Rosamond H. Peirce, the charts by P. Stanley King.

APPENDIX TABLES

TABLE I.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING AREAS, 1932-37*

(Million bushels)

Year	World ex-Russia ^a				United States	Three chief ex-ports ^b	Europe ex Russia			French North Africa ^d	India	Others ex-Russia ^a	USSR
	Old total	New total ^a	Northern Hemisphere	Southern Hemisphere			Total	Lower Danube ^c	Other Europe				
1932.....	3,714	3,844	3,325	519	757	898	1,488	222	1,266	75	337	289	744 ^e
1933.....	3,635	3,810	3,268	542	552	745	1,742	367	1,375	70	353	348	1,019
1934.....	3,340	3,492	3,047	445	526	650	1,546	249	1,297	97	352	321	1,117
1935.....	3,391	3,550	3,181	369	626	568	1,575	302	1,273	70	363	348	1,133
1936 ^f	3,315	3,455 ^g	2,983 ^g	472	626	627	1,480	382	1,098	51	352	319 ^g	.....
1936 ^h	3,313	3,515	3,046	469	626	627	1,482	383	1,099	50	352	378	.....
1937 ^h	3,594	3,806	3,371	435	886	548	1,537	357	1,180	71	366	398	.....

* Data summarized from Table II (except for India and USSR). Figures in italics are in part unofficial estimates. Dots (...) indicate no data available.

^a Excludes China, Iran, and Iraq, but includes Turkey, Syria and Lebanon, Palestine, Cyprus, Manchukuo, Brazil, and Peru formerly omitted from our series.

^b Canada, Australia, Argentina.

^c Hungary, Yugoslavia, Rumania, Bulgaria.

^d Morocco, Algeria, Tunis.

^e Not fairly comparable with data for later years.

^f As of about May 15, 1937.

^g Using for Turkey an earlier estimate of 80 million bushels, now recognized as incomplete; see p. 6.

^h As of about Sept. 20, 1937.

TABLE II.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING COUNTRIES, 1932-37*

(Million bushels)

Year	U.S. winter	U.S. spring	Canada	Australia	Argentina	Uruguay	Chile	Brazil, Peru	Hungary	Yugoslavia	Rumania	Bulgaria	Morocco	Algeria	Tunis
1932...	491.8	265.1	443.1	213.9	240.9	5.4	28.7	8.85	64.5	53.4	55.5	48.1	28.0	29.2	17.5
1933...	376.5	175.2	281.9	177.3	286.1	14.7	35.3	7.98	96.4	96.6	119.1	55.5	28.9	32.0	9.2
1934...	438.0	88.4	275.8	133.4	240.7	10.7	30.1	7.13	64.8	68.3	76.6	39.6	39.6	43.5	13.8
1935...	465.3	161.0	281.9	144.2	141.5	15.1	31.9	7.75	84.2	73.1	96.4	47.9	20.0	33.5	16.9
1936 ^a ...	519.0	107.4	229.2	149.6	247.8	10.5	....	....	86.7	107.4	128.7	59.3	13.2	29.8	8.1
1936 ^b ...	519.0	107.4	229.2	150.2	247.8	10.5	28.7	....	87.8	107.4	128.7	59.3	12.2	29.8	8.1
1937 ^b ...	688.1	197.8	188.2	155.0	205.0	....	....	....	70.1	86.3	136.0	64.2	18.0	34.4	18.4

Year	United Kingdom	Irish Free State	France	Italy	Germany	Czechoslovakia	Austria	Switzerland	Belgium ^c	Netherlands	Denmark	Norway	Sweden	Spain	Portugal
1932...	43.6	.83	333.5	276.9	183.8	53.7	12.2	4.00	16.1	12.8	11.0	.75	24.1	184.2	23.8
1933...	62.4	1.98	362.3	298.5	205.9	72.9	14.6	4.96	16.1	15.3	11.5	.76	26.3	138.2	15.1
1934...	69.8	3.80	338.5	233.1	166.5	50.0	13.3	5.52	17.9	18.0	12.8	1.20	27.8	186.8	24.7
1935...	65.4	6.69	285.0	282.8	171.5	62.1	15.5	5.99	17.1	16.7	14.7	1.77	23.6	158.0	22.1
1936 ^a ...	55.3	7.84	253.4	224.3	162.1	55.6	13.5	4.47	17.2	16.3	11.4	2.09	21.5	121.5	8.4
1936 ^b ...	55.3	7.84	255.9	225.0	162.1	55.6	13.5	4.47	17.2	15.6	11.4	2.09	21.9	121.5	8.7
1937 ^b ...	56.1	7.30	246.2	294.3	157.4	49.9	14.0	6.16	15.8	12.7	11.9	2.20	26.5	147.0	14.5

Year	Poland	Lithuania	Latvia	Estonia	Finland	Greece	Turkey	Other Near East ^d	Egypt	Japan	Chosen	Manchukuo	Mexico	South Africa	New Zealand
1932...	49.5	9.4	5.29	2.08	1.48	17.1	69.0	12.9	52.6	32.8	9.0	39.4	9.7	10.6	11.06
1933...	79.9	8.2	6.72	2.45	2.46	28.4	98.2	16.7	40.0	40.4	8.9	52.5	12.1	11.8	9.04
1934...	76.4	10.5	8.05	3.11	3.28	25.7	99.7	21.5	37.3	47.7	9.3	23.9	11.0	16.9	5.93
1935...	73.9	10.1	6.52	2.27	4.23	27.2	92.6	24.8	43.2	48.7	9.7	34.3	10.7	20.2	8.86
1936 ^a ...	78.4	7.9	5.27	2.43	5.44	23.4	138.5 ^e	20.4	45.7	45.2	9.0	30.7	13.0	16.2	7.15
1936 ^b ...	78.4	7.9	5.27	2.43	5.44	21.3	138.5 ^e	20.6	45.7	45.2	8.1	35.2	13.6	16.2	7.15
1937 ^b ...	65.8	8.5	6.39	2.90	6.03	29.0	140.3	....	45.4	49.6	11.0	42.4	12.9	15.0	....

* Data of U.S. Department of Agriculture and International Institute of Agriculture. Figures in italics are unofficial estimates. Dots (...) indicate no data available.

^a As of about May 15, 1937.

^b As of about Sept. 20, 1937.

^c Including Luxemburg.

^d Syria and Lebanon, Palestine, Cyprus.

^e Revised figure open to question; see p. 6.

WORLD WHEAT SURVEY AND OUTLOOK

TABLE III.—WHEAT RECEIPTS IN NORTH AMERICA, MARCH–AUGUST 1937, WITH COMPARISONS*
(Million bushels)

Year	United States (13 primary markets)							Canada (country elevators and platform loadings)						
	March	April	May	June	July–June ^a	July	Aug.	March	April	May	June	July	Aug.–July ^a	Aug.
1932.....	13.4	13.2	15.3	13.5	374.7	41.0	40.7	12.9	6.0	7.5	16.3	3.2	265.2	17.6
1933.....	12.7	15.8	23.3	28.6	281.9	37.2	26.7	20.8	10.3	10.8	19.5	10.5	370.7	25.6
1934.....	9.1	8.4	12.5	23.4	199.1	49.7	23.0	9.1	7.3	8.3	12.3	10.9	227.6	30.8
1935.....	4.7	6.4	8.3	10.0	160.1	28.9	48.2	8.1	6.6	5.6	9.3	12.6	228.2	13.3
1936.....	9.8	7.4	11.1	14.8	229.6	84.2	29.5	7.2	4.6	5.5	8.7	4.0	217.0	40.8
1937.....	7.6	8.9	7.6	19.4	218.1	111.9	62.2	5.9	4.2	4.2	3.6	3.4	165.6	19.8

* United States data unofficial, compiled from *Survey of Current Business* (prior to June 1933, for 14 markets including Toledo); Canadian data computed from official figures given in *Canadian Grain Statistics*.

^a From 1931–32 to 1936–37.

TABLE IV.—WHEAT VISIBLE SUPPLIES, MAY–SEPTEMBER 1937, 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						
May 1, 1937.....	210.0	26.3	.0	55.9 ^a	10.3	92.5	51.0	12.3	63.3	39.5	14.7
June 1	165.9	17.1	.0	48.7 ^a	7.3	73.1	41.1	11.0	52.1	30.0	10.7
July 1	128.5	16.2	.1	35.0 ^a	5.3	56.6	34.2	10.3	44.5	20.0	7.4
Aug. 1	180.1	89.4	.1	27.8 ^a	4.1	121.4	25.6	12.0	37.6	14.5	6.6
Sept. 1	226.8	137.9	1.4	38.9 ^a	2.6	180.8	20.0	11.2	31.2	10.0	4.8
Sept. 1, 1926–28..	165.1	76.3	2.5	21.0	3.6	103.4	41.1	8.6	49.7	6.2	5.8
1932.....	374.3	188.3	11.3	111.1	5.6	316.3	24.5	8.3	32.8	18.5	6.6
1933.....	430.1	151.7	3.7	194.1	4.8	354.3	34.7	10.2	44.9	19.5	11.4
1934.....	427.5	122.4	.0	183.7	10.1	316.2	37.9	13.0	50.9	40.5	19.9
1935.....	316.8	62.5	.0	175.3	18.6	256.4	18.6	7.6	26.2	23.2	11.0
1936.....	250.7	81.0	.0	104.1 ^a	18.3	203.4	23.7	7.4	31.1	8.5	7.7
1937.....	226.8	137.9	1.4	38.9 ^a	2.6	180.8	20.0	11.2	31.2	10.0	4.8

* Selected, for dates nearest the first of each month, from weekly data in *Commercial Stocks of Grain in Store in Principal U.S. Markets*, *Canadian Grain Statistics*, and (for stocks outside North America) *Broomhall's Corn Trade News*.

^a Stocks in transit by rail (0 to 13 million bushels) deducted from officially published totals to insure comparability with data for preceding months.

TABLE V.—UNITED STATES AND CANADIAN CARRYOVERS OF WHEAT, FROM 1932*
(Million bushels)

Year	United States (July 1)						Canada (July 31)						
	On farms	In country mills and elevators	Commercial stocks	In city mills ^a	Total in four positions	U.S. grain in Canada	On farms	In country mills and elevators ^b	In terminal elevators	In transit	In flour mills ^c	Total in five positions	Canadian grain in U.S.
1932.....	93.8	41.6	168.4	71.7	375.5	15.9	7.5	33.5	78.6	9.3	2.9	131.8	11.7 ^d
1933.....	82.9	64.3	123.7	107.0	377.9	4.1	12.3	77.9	109.3	9.0	3.2	211.7	7.7 ^d
1934.....	62.5	48.2	80.5	83.1	274.3	.0	8.7	70.4	104.7	7.7	2.5	194.0	10.0
1935.....	44.3	31.8	22.0	49.5	147.6	.0	7.9	53.8	126.6	12.9	.9	202.1	11.7
1936.....	44.0	22.5	20.6 ^e	50.6	137.7 ^f	.0	5.5	36.2	59.7	5.0	1.7	108.1	19.3
1937.....	21.9	12.3	9.0 ^e	47.9 ^g	91.1 ^f	.1	4.0	7.4	17.7	2.8	.8	32.7	4.1

* Based on official data of U.S. Department of Agriculture and Dominion Bureau of Statistics.

^a Estimates of U.S. Department of Agriculture, based on stocks in city mills reported to the Census Bureau, raised to allow for stocks in non-reporting mills.

^b Includes private terminal elevators and flour mills in Western Division.

^c In Eastern Division only.

^d Revised; see *Monthly Review of the Wheat Situation*, Oct. 23, 1936, p. 24.

^e Excluding 4.0 and 7.2 million bushels of new-crop wheat in 1936 and 1937 respectively.

^f Excluding new-crop wheat from positions specified in notes e and g. Official carryover totals include this wheat because comparable exclusions for earlier years cannot yet be made.

^g Excluding 5.0 million bushels of new-crop wheat.

APPENDIX TABLES

33

TABLE VI.—UNITED STATES FLOUR PRODUCTION AND DISPOSITION, MONTHLY FROM JANUARY 1932*

(Thousand barrels)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	July-June
A. ESTIMATED TOTAL UNITED STATES PRODUCTION													
1932.....	8,702	8,191	9,044	8,738	8,260	8,346	8,363	9,621	10,048	10,034	9,335	8,911	107,395
1933.....	8,648	7,726	9,454	9,913	9,327	9,115	8,803	7,147	8,021	8,703	8,634	7,800	110,495
1934.....	9,306	8,405	8,933	7,965	8,657	8,020	7,826	9,256	9,435	9,819	8,782	8,071	100,394
1935.....	8,894	8,136	8,550	8,337	8,286	7,835	7,525	8,561	9,602	10,495	8,784	7,617	103,227
1936.....	9,176	8,927	8,769	8,341	8,053	8,355	10,028	9,753	9,284	9,733	8,558	8,778	104,505
1937.....	8,739	8,051	8,939	8,844	7,998	8,098	8,904	9,110 ^a	...	...	...	...	106,803
B. NET EXPORTS PLUS SHIPMENTS TO POSSESSIONS													
1932.....	903	753	652	582	388	470	399	460	420	417	537	447	5,181
1933.....	392	344	392	392	384	425	337	416	362	352	338	428	5,009
1934.....	415	325	422	469	322	265	322	486	489	434	432	354	4,451
1935.....	319	315	359	333	347	320	296	315	314	356	302	294	4,510
1936.....	298	310	328	371	358	344	320	356	470	361	307	401	3,886
1937.....	358	398	370	378	420	356	308	500 ^b	...	...	...	...	4,495
C. ESTIMATED NET RETENTION													
1932.....	7,799	7,438	8,392	8,156	7,872	7,876	7,964	9,161	9,628	9,617	8,798	8,464	103,647
1933.....	8,256	7,382	9,062	9,521	8,943	8,690	8,466	6,731	7,659	8,351	8,296	7,372	105,486
1934.....	8,891	8,080	8,511	7,496	8,335	7,755	7,504	8,770	8,946	9,385	8,350	7,717	95,943
1935.....	8,575	7,821	8,191	8,004	7,939	7,515	7,529	8,246	9,288	10,139	8,482	7,323	98,717
1936.....	8,878	8,617	8,441	7,970	7,695	8,011	9,708	9,397	8,814	9,372	8,251	8,377	100,619
1937.....	8,381	7,653	8,569	8,466	7,578	7,742	8,596	8,610 ^a	...	...	...	...	102,308

* Total production as estimated by the Food Research Institute, now on a revised basis (see p. 7). Trade data from U.S. Department of Commerce, *Monthly Summary of Foreign Commerce, Foodstuffs Round the World*, and Statements Nos. 3009, 3013, and 3015.

^a Estimated from data in the *Northwestern Miller*.

^b Estimated.

TABLE VII.—INTERNATIONAL SHIPMENTS OF WHEAT AND FLOUR, WEEKLY FROM MAY 1937*

(Million bushels)

Week ending	Total	Shipments from							Shipments to Europe				To ex-Europe		
		North America	Argentina ^a	Australia	South Russia	Danube	India	Other countries	Total	United Kingdom	Orders	Continent	Total	U.S.	Others
May 8.....	10.55	2.79	1.70	2.23	.00	3.02	.01	.80	8.45	3.11	.62	4.72	2.10	.34	1.76
15.....	12.64	4.83	2.08	3.05	.00	1.93	.06	.69	11.02	1.84	3.70	5.48	1.62	.12	1.50
22.....	12.94	4.87	2.00	3.22	.00	1.83	.50	.52	11.11	2.36	1.81	6.94	1.83	.34	1.49
29.....	11.96	2.97	1.01	4.31	.00	2.67	.05	.95	10.46	3.38	1.47	5.61	1.50	.20	1.30
June 5.....	11.71	3.02	2.72	3.80	.00	1.30	.05	.82	9.48	3.33	2.82	3.33	2.23	.18	2.05
12.....	10.14	4.08	1.19	2.28	.00	1.49	.79	.31	9.05	2.98	3.67	2.40	1.09	.16	.93
19.....	10.65	4.31	1.55	2.11	.00	.71	1.60	.37	8.68	3.02	2.61	3.05	1.97	.15	1.82
26.....	7.45	2.92	.82	1.87	.00	.59	1.07	.18	5.54	1.91	1.48	2.15	1.91	.21	1.70
July 3.....	9.38	4.02	1.08	2.17	.00	1.11	.82	.18	7.40	2.43	1.86	3.11	1.98	.35	1.63
10.....	7.24	1.44	1.41	2.06	.00	1.06	1.01	.26	5.25	1.50	1.92	1.83	1.99	.18	1.81
17.....	5.19	2.49	.67	1.13	.00	.12	.54	.24	3.81	1.75	1.27	.79	1.38	.06	1.32
24.....	6.01	3.31	.17	1.16	.00	.33	.71	.33	5.11	2.01	1.51	1.59	.90	.14	.76
31.....	6.58	2.80	.92	1.35	.00	.46	.84	.21	4.88	1.60	1.25	2.03	1.70	.09	1.61
Aug. 7.....	7.04	2.51	.89	1.81	.18	.69	.68	.28	5.17	1.92	1.52	1.73	1.87	.10	1.77
14.....	6.55	2.56	.88	1.47	.00	.88	.34	.42	5.05	1.90	1.32	1.83	1.50	.01	1.49
21.....	7.67	4.07	.86	.92	.09	1.19	.35	.19	5.82	1.85	1.23	2.74	1.85	.07	1.78
28.....	7.83	2.85	.97	1.44	.45	1.71	.25	.16	5.66	1.54	1.17	2.95	2.17	.00	2.17
Sept. 4.....	6.71	2.16	.99	.84	.77	.96	.93	.06	5.24	2.34	1.29	1.61	1.47	.00	1.47
11 ^b	7.46	2.11	.89	.94	1.68	1.14	.46	.24	5.67	....	....	....	1.79	....	....
18 ^b	7.37	2.85	.56	.61	1.28	1.62	.06	.39	6.04	....	....	....	1.33	....	....

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

^a Including Uruguay.

^b Preliminary.

TABLE VIII.—NET EXPORTS AND NET IMPORTS OF WHEAT AND FLOUR, MONTHLY FROM AUGUST 1936, WITH SUMMATIONS AND COMPARISONS*

(Million bushels)

A. NET EXPORTS (In parentheses, net imports)

Month or Period	United States ^a	Canada	Australia	Argentina	Chile	Hungary	Yugoslavia	Rumania	Bulgaria	Morocco	Algeria	Tunisia	India	USSR
Aug.	(5.53)	22.87	4.92	4.04	.00	3.22	1.93	5.04	1.01	.00	.88	(.04)	.39	.26
Sept.	(2.99)	22.40	7.60	4.30	.00	3.68	3.38	6.72	.69	(.00)	2.03	(.02)	1.51	.37
Oct.	(2.79)	28.90	5.47	6.27	.00	2.59	2.10	5.52	1.16	(.37)	.03	.03	2.07	.39
Nov.	(2.81)	35.11	5.59	4.74	.00	2.54	1.70	2.02	.61	(.26)	1.16	(.19)	2.33	.28
Dec.	(2.71)	22.54	7.30	13.32	.00	2.05	1.21	2.32	1.03	(.32)	1.25	(.20)	.94	.75
Jan.	(1.39)	11.18	10.66	29.56	.00	2.05	.48	1.58	.27	(.62)	.09	(.29)	1.04	.43
Feb.	(.64)	6.91	10.65	32.07	.00	1.78	.89	1.04	.16	(.33)	.01	.01	.21	.54
Mar.	(.73)	6.47	11.70	32.31	(.00)	1.84	1.64	1.38	.14	(.01)	.01	.01	.21	.21
Apr.	(.37)	4.88	8.20	18.96	.00	2.33	1.52	6.22	.64	.18	.12	.01	.75	.23
May ....	.24	9.57	12.26	8.03	...	1.71	2.40	3.71	.68	...	.22	.00	.83	.25
June ....	.46	13.91	10.06	5.07	...	.78	.63	...	.73	...	.23	.02	4.56	.52
July ^b	2.36	10.08 ^c	7.23	3.71	...	.51	...	...	.78	...	...	...	3.26	...
1936-37 ^d	(16.90)	194.85	101.64	162.38	.00	25.08	18.20	38.00	7.90	(.50)	6.20	(.20)	18.63 ^e	4.40
1935-36	(31.08)	254.13	102.14	69.88	2.29	17.30	.79	5.87	1.14	4.87	9.91	4.63	1.16	28.53

B. NET IMPORTS (In parentheses, net exports)

Month or Period	United Kingdom	Irish Free State	France ^f	Italy	Germany	Czechoslovakia	Austria	Switzerland	Belgium ^g	Netherlands	Denmark	Norway	Sweden	Portugal
Aug.	14.89	1.07	(.07)	...	.09	(.00)	1.32	1.22	3.94	1.56	.46	.53	(.60)	.03
Sept.	15.25	.53	.49	...	.06	(.03)	1.32	1.55	4.84	1.58	.61	.26	(.13)	.01
Oct.	17.39	1.64	.46	...	.12	.00	.90	1.61	3.31	1.47	.81	.76	(.01)	.01
Nov.	18.39	1.41	.97	...	.16	(.19)	.45	1.59	4.32	1.35	.66	.58	.17	.01
Dec.	18.55	1.58	.87	...	.08	(.98)	.47	1.98	3.72	2.33	.66	1.23	.15	.00
Jan.	11.48	.39	1.04	4.70	.20	(.70)	.41	1.06	1.50	1.78	.48	.19	.05	.00
Feb.	20.24	.71	1.34	5.38	.22	(1.01)	.81	1.28	2.75	1.71	.58	.53	.16	.00
Mar.	20.00	1.01	1.10	8.00	.82	(1.00)	1.12	1.18	3.66	1.93	.38	.79	.12	.01
Apr.	14.91	.49	.80	7.64	1.86	(1.85)	1.12	2.50	2.90	2.87	.41	1.18	.21	.02
May	15.53	1.51	.91	12.60	8.23	(1.72)	.89	1.88	2.22	1.36	.27	1.47	.15	.01
June	15.92	1.04	.82 ^h	9.15	10.98	(1.44)	1.30	1.04	3.34	1.46	.52	.73	.13	.00
July ^b	16.69	...	.50 ^h	3.95	8.94	(.24)	...	.83	2.96	1.84	.52	.33	.12	...
1936-37 ^d	199.24	12.50	9.20	57.46	31.76	(9.16)	9.80	17.72	39.46	21.24	6.36	8.58	.52	.11
1935-36	205.32	14.98	7.97	5.11	(.33)	2.21	7.10	16.66	38.98	21.74	8.99	7.73	(1.89)	(3.59)

B. NET IMPORTS (In parentheses, net exports)

Month or Period	Poland	Lithuania	Latvia	Estonia	Finland	Greece	Syria, Lebanon	Egypt	Japan	Manchukuo	China	Cuba ⁱ	South Africa	New Zealand
Aug.	(1.12)	.00	.00	.00	.45	1.54	(.07)	.00	.48	.66	(.31)	.25	.00	.08
Sept.	(.82)	.00	.00	.00	.28	1.55	(.19)	.01	.67	.28	(.28)	.49	.00	.13
Oct.	(.69)	.00	.00	.00	.21	1.79	(.32)	.01	.17	.42	(.13)	.27	.01	.01
Nov.	(.63)	.00	.00	.00	.18	1.63	(.36)	.01	(.21)	.83	(.04)	.39	.01	.02
Dec.	(.53)	.00	.00	.02	.18	1.69	(.49)	.01	.13	.57	(.00)	.47	.01	.02
Jan.	(.70)	.00	.02	.12	.38	1.97	(.22)	(.01)	.56	.41	.04	.46	.00	.01
Feb.	(.37)	.00	.08	.00	.33	1.54	(.04)	(.07)	.43	.17	.09	.50	.00	.00
Mar.	(.40)	.00	.22	.00	.20	2.32	.00	(.03)	.95	.32	.85	.36 ^j	(.23)	.04
Apr.	(.02)	.00	.28	.05	.26	2.34	.23	(.11)	.13	.73	.71	.41 ^j	(.71)	.03
May	(.03)	.00	.20	.00	.44	1.74	.01	(.19)	.29	.39	.20	.42	(.71)	.03
June	(.00)	.00	.20	.00	.37	1.59	.01	(.18)	.22	...	...	.35	...	.02
July ^b	(.01)	...	...	...	.40	...	...	(.10)	...	...	...	.32	...	...
1936-37 ^d	(5.32)	.00	1.10	.20	3.68	21.10	(1.50)	(.70)	3.72	6.00	1.50	4.69	(1.20)	.60
1935-36	(7.09)	(2.12)	(1.54)	.00	4.33	14.76	(.40)	.18	4.79	14.49	7.91	4.92	.07	.96

* Data from official sources, in large part through International Institute of Agriculture. Dots (...) indicate that data are not available.

^a Adjusted for shipments to possessions.

^b Figures preliminary for many countries.

^c Gross exports for August were 7.84 million bushels.

^d Including our estimates for missing monthly data.

^e Includes upward revision of monthly trade data of .53 million bushels.

^f Net trade in "commerce général."

^g Including Luxemburg.

^h Net trade in "commerce spécial."

ⁱ Gross imports of flour from unofficial sources.

TABLE IX.—WHEAT DISPOSITION ESTIMATES, ANNUALLY FROM 1931-32*

(Million bushels)

Year	Domestic supplies			Domestic utilization				Surplus over domestic use ^c	Net exports	Year-end stocks
	Initial stocks	New crop	Total	Milled (net)	Seed use	Balancing item ^e	Total ^b			
A. UNITED STATES (JULY-JUNE)										
1931-32....	313	942	1,255	474	80	+199	753	502	127 ^d	375
1932-33....	375	757	1,132	484	84	+150	718	414	36	378
1933-34....	378	552	930	440	78	+110	628	302	28	274
1934-35....	274	526	800 ^e	450	83	+120	653	147	(1) ^f	148
1935-36....	148	626	774 ^e	466	87	+111	664	110	(28) ^f	138 ^g
1936-37 ^h ...	137 ^g	626	763 ^e	468 ^t	96	+134 ^t	698	65	(25) ^f	90 ^g
1936-37 ⁱ ...	138 ^g	626	764 ^e	471	96	+129	696	68	(23) ^f	91 ^g
1937-38 ^j ...	91 ^g	886	977	480	95	+ 94	669	308	123	185
B. CANADA (AUGUST-JULY)										
1931-32....	134	321	455	42	37	+37	116	339	207	132
1932-33....	132	443	575	44	36	+19	99	476	264	212
1933-34....	212	282	494	43	33	+30	106	388	194	194
1934-35....	194	276	470	43	32	+28	103	367	165	202
1935-36....	202	282	484	43	33	+46	122	362	254	108
1936-37 ^h ...	109	229	338	43	35	+25	103	235	200	35
1936-37 ⁱ ...	108	229	337	44	33	+32	109	228	195	33
1937-38 ^j ...	33	188	221	44	34	+30	108	113	80	33
C. AUSTRALIA (AUGUST-JULY)										
1931-32....	60	191	251	32	16	- 3	45	206	156	50
1932-33....	50	214	264	33	16	+10	59	205	150	55
1933-34....	55	177	232	33	13	+15	61	171	86	85
1934-35....	85	133	218	32	13	+ 7	52	166	109	57
1935-36....	57	144	201	33	13	+10	56	145	102	43
1936-37 ^h ...	47	150	197	33	14	+ 5	52	145	110	35
1936-37 ⁱ ...	43	150	193	33	15	+ 8	56	137	102	35
1937-38 ^j ...	35	155	190	34	15	+ 6	55	135	95	40
D. ARGENTINA (AUGUST-JULY)										
1931-32....	80	220	300	65	24	+ 6	95	205	140	65
1932-33....	65	241	306	65	24	+10	99	207	132	75
1933-34....	75	286	361	66	23	+ 7	96	265	147	118
1934-35....	118	241	359	69	17	+ 6	92	267	182	85
1935-36....	85	141	226	69	21	+ 1	91	135	70	65
1936-37 ^h ...	65	248	313	69	22	+ 7	98	215	155	60
1936-37 ⁱ ...	65	248	313	70	23	+ 3	96	217	162	55
1937-38 ^j ...	55	205	260	70	23	+ 2	95	165	105	60

* Based on official data so far as possible; see WHEAT STUDIES, December 1936, Table XXX. United States data on stocks, crops, and seed use of wheat shown here are revised official figures.

^a Total domestic utilization minus quantities milled for food and used for seed.

^b Total domestic supplies less surplus over domestic use.

^c Summation of net exports and year-end stocks.

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

^e Not including estimated net imports.

^f Net imports.

^g Excluding new-crop wheat in some positions. See footnotes e to g, Table V.

^h Estimates as of May 1937.

ⁱ May forecast of millings (and consequently balancing item) changed, on the basis of our revised estimates of millings, to secure comparability with earlier years.

^j Estimates as of September 1937.

WORLD WHEAT SURVEY AND OUTLOOK

TABLE X.—SELECTED WHEAT PRICES, WEEKLY FROM MAY 1937*
(U.S. cents per bushel)

Week ending	Futures							United States cash					
	Liverpool		Winnipeg		Buenos Aires	Chicago		Basic cash (Chl.)	No. 2 H.W. (K. C.)	No. 2 R.W. (St. L.)	No. 1 Dk.N.S. (Mnpls.)	No. 2 Hd.A.D. (Mnpls.)	Western White (Seattle)
	July	Oct.	July	Oct.	Sept. ^a	July	Sept.						
May 15.....	138	129	127	117	120	116	115	127	130	131	146	128	112
22.....	141	133	132	123	121	121	119	135	132	...	147	130	118
29.....	140	131	127	118	122	117	116	126	130	132	146	128	115
June 5.....	134	124	119	112	119	110	110	121	127	125	139	117	110
12.....	126	120	117	111	112	108	108	119	123	123	136	110	110
19.....	128	123	121	115	109	109	109	122	124	124	144	109	112
26.....	129	128	127	122	113	114	114	127	120	120	152	132	114
July 3.....	139	139	141	134	123	122	123	131	121	128	152	148	117
10.....	143	141	145	138	121	123	124	126	122	125	156	142	114
17.....	148	144	150	143	125	125	126	129	125	124	153	133	112
24.....	144	141	145	138	123	121	121	126	122	122	155	129	108
31.....	140	137	138	132	123	...	117	121	117	117	146	125	110
Aug. 7.....	129 ^b	130	125 ^c	126	123	116 ^d	114	117	113	114	139	138	102
14.....	127	128	127	128	123	115	112	116	112	111	137	124	101
21.....	124	126	124	125	123	112	109	111	109	109	130	121	97
28.....	122	125	121	123	125	110	106	109	108	107	130	115	94
Sept. 4.....	122	125	122	124	125	109	105	109	108	107	130	113	95
11.....	125	129	126	128	128	111	107	111	112	111	138	113	..
18.....	124	130	124	125	...	106	103	107	107	107	132	107	..

Week ending	British parcels	Liverpool (Tuesday prices)					European domestic				Winnipeg		Buenos Aires 80-kilo ^a
		No. 1 Man.	No. 3 Man.	No. 2 H. W. ^d	Arg. Rosafé ^e	Aus-tralian ^f	Great Britain	France ^g	Ger-many ^g	Italy ^g	Wtd. average	No. 3 Man.	
May 8.....	144	150	144	148	142	141	130	183	227	178	129	125	123
15.....	144	148	142	...	145	142	130	183	227	178	126	123	122
22.....	144	149	145	...	148	143	129	182	227	178	131	129	123
29.....	142	151	147	...	145	144	131	182	227	178	127	124	123
June 5.....	137	141	138	...	140	141	131	184	227	178	119	117	122
12.....	134	134	130	135	...	134	130	184	227	178	117	114	116
19.....	132	137	133	136	...	132	129	184	227	198	120	118	113
26.....	133	144	140	141	...	135	126	184	227	198	125	122	117
July 3.....	138	156	151	151	...	139	126	160	228	198	140	136	127
10.....	145	167	161	159	139	146	127	161	228	198	143	140	125
17.....	145	162	157	153	141	144	130	157	228	198	148	145	129
24.....	149	169	163	159	140	148	130	156	228	198	142	139	128
31.....	145	158	152	148	140	143	132	156	228	198	136	132	126
Aug. 7.....	136	157	149	147 ^f	137	142	132	184	212	198	130	124	126
14.....	141	147	138	142	136	138	130	184	220	198	130	126	126
21.....	138	152	144	143	133	137	122	184	220	198	124	122	126
28.....	139	146	136	137	132	135	118	183	220	198	121	118	...
Sept. 4.....	132	149	138	137	130	130	114	184	220	198	121	118	...
11.....	139	154	148	140	132	132	...	176	220	198	125	121	...

* For methods of computation see WHEAT STUDIES, December 1936, XIII, 230-31. For Great Britain, prices are from *The London Grain, Seed and Oil Reporter*, Broomhall's *Corn Trade News*, and *The Agricultural Market Report*; Canada, *Grain Trade News*, and *Canadian Grain Statistics*; Buenos Aires, *Revista Oficial*; United States, *Daily Trade Bulletin and Crops and Markets*; France, *Le bulletin des halles*; Germany, *Deutsche Getreide-Zeitung*; Italy, *International Institute of Agriculture Monthly Crop Report* Prices are converted to U.S. cents at noon buying rates for cable transfers. Dots (.) indicate no quotations.

^a July future through May.

^b March future from week ending Aug. 7.

^c May future from week ending Aug. 7.

^d Gulf shipments; duty added.

^e Duty added; new crop from July 6.

^f To London.

^g Fixed prices. Irregularities in French prices due to fluctuations in the exchange rate; prices in francs per quintal were: May, 150.0; June, 151.5; July, 153.0; August, 180.0; and September, 181.0.

^h Apr. 24, 122; May 1, 122.

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