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WORLD WHEAT SURVEY AND OUTLOOK SEPTEMBER 1939

Helen C. Farnsworth and Holbrook Working

In mid-May, there was fair prospect that the world wheat surplus of 1939–40 would be smaller than that of 1938–39. As the weeks passed this prospect gave way to expectations of an increased surplus. Resulting price declines of 20 to 25 per cent to late July carried Liverpool prices in sterling to the lowest level since futures trading began in 1883. The period of price decline was characterized by heavy absorption of import wheat for security reserves in Europe. May–July shipments of wheat, unprecedentedly heavy in relation to shipments in earlier months, brought world net exports in 1938–39 to the highest total in seven years.

Prospects for war, and its eventuation, dominated wheat-price developments after mid-August. At Chicago there was an unprecedented advance of 21 cents, and at Winnipeg of 24 cents, in the five trading days beginning September 1. Subsequent reaction and partial recovery left North American prices on September 16 about 20 cents higher, in United States currency, than in mid-August.

The outlook for trade and prices depends heavily upon unpredictable political and military developments. Under continued warfare, not materially widened as to belligerents, most European importing countries may be able to maintain wheat consumption at levels not far below other recent years without reduction of reserves built up last year. Should this prove true, and should non-European nations reduce their imports by about 25 million bushels, world net exports might be 70 to 120 million bushels smaller than in 1938–39.

Existing heavy wheat surpluses in exporting countries suggest that price developments during October–January may be largely determined by presence or absence of renewed severe competition for export sales. Much will depend on unpredictable governmental policies; but we incline to the view that North American wheat prices are more likely to decline moderately than to advance from the levels of mid-September.

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As this Survey goes to the printer, it is natural for many to view most of the developments in the world wheat situation prior to the outbreak of war as belonging to a past era. Interest centers on the outlook for a war-torn world in coming months. As the days pass, however, it is likely to appear that, for the international wheat situation, the developments prior to September are not lacking in pertinence for the present and future.

The past few months have clearly established two important facts: first, that European importing countries held a larger part of the heavy world wheat carryover of 1939 than had been previously anticipated; and second, that the new world wheat crop is a large one, probably smaller only than the record crop of 1938. From late May to mid-July, estimates of prospective wheat supplies for 1939–40 were revised upward almost week by week. Now estimated at 5,290 million bushels, the indicated total appears to be of record size, roughly 150 million bushels larger than in 1938–39.

Unexpectedly heavy European buying of import wheat in the last quarter of 1938–39 was mainly for the purpose of building up "security reserves," primarily in Great Britain. Part of the wheat thus purchased was apparently sold at "distress prices" by merchants and speculators who had bought heavily from the Argentine grain board on the general price advance of April–May. Whether total exports through July were substantially enlarged as a result of the earlier speculative buying or whether they would have been about equally large in response to European purchases for reserves under different conditions, is an open question. In any case, expanded European imports, supplemented by a heavy demand for import wheat in the Orient, brought world net exports for 1938–39 to the highest total in seven years.

Two price movements were spectacular in the period from May 1 to mid-September: a sharp decline of 20–25 per cent between the first of June and late July; and an unprecedented advance in North America following outbreak of war in Europe on September 1.

During May, wheat prices at Chicago registered substantial gains, under the influence of crop deterioration in the United States and promise that the burden of world wheat surplus might be substantially lightened in 1939–40. At Winnipeg and Liverpool, however, advancing tendencies were held in check by free selling of Argentine wheat by the grain board at prices only slightly above those prevailing in April.

Extraordinarily favorable progress of the Canadian crop from late May was primarily responsible for weakening of prices in North American markets from the first of June. Anticipations of a decreased world wheat surplus for 1939–40 gradually changed to expectations of a larger surplus than that of 1938–39. Resulting decreases of prices in North American markets were met, and apparently sometimes anticipated, by reductions in c.i.f. prices of Argentine wheat, which weakened readily on account of the large supplies put afloat following the heavy selling in May. Toward the end of the decline in July Liverpool futures prices in sterling fell below the previous record lows established in September 1931, before devaluation of the pound.

CONTENTS

	PAGE
Trade and Consumption, 1938–39	2
Large Old-Crop Carryovers	9
Crops of 1939	11
Prices and Spreads	14
Record Supplies for 1939–40	21
Outlook for Trade	22
Prospects for 1940 Carryovers	27
Outlook for Prices	27
Appendix Note	31
Appendix Tables	33

The course of prices at Chicago during June–August was influenced also by expectations of price support from the governmental wheat loan program, but peculiarities of the loan system as a price-supporting measure prevented the sort of price stabilization that was widely expected.

Prospects of war became the dominant influence affecting wheat prices during the latter part of August. Following the outbreak of hostilities, wheat prices at Winnipeg advanced on four successive trading days by the full amount (5 cents) permitted under exchange regulations, and at Chicago prices on deferred futures rose less than the maximum permitted only on the second of these four days. Subsequent reaction and partial recovery left North American prices on September 16 about 20 cents higher, in United States currency, than in mid-August.

The current outlook for trade and prices is complicated by numerous uncertainties incident to the war. Many of these cannot now be appraised. But on the basis of four major assumptions (pp. 22–23), we conclude that European wheat imports in 1939–40 may fall somewhere within the range of 370 to 420 million bushels. Non-European imports will perhaps be reduced by some 25 million bushels from their level in 1938–39, reflecting improvement in several non-European crops, the reduced value of Chinese exchange, and prospective curtailment of shipping space. Under the conditions assumed, total net exports might be as small as 525 million bushels or as large as 575 million. In any case, they would fall considerably below our present figure of 643 million bushels for 1938–39.

World wheat consumption, unprecedentedly large in 1938–39, will presumably be considerably smaller in 1939–40. The war will presumably restrict wheat consumption in Europe, and in North America less wheat will probably be used for animal feed. In many countries large wheat stocks will be owned or controlled by governments, and stocks not so controlled will be held more willingly than in 1938–39 by private individuals. In total, world wheat stocks will probably stand at a new record high level in 1940, concentrated most heavily in the major exporting countries.

Wheat prices in North America during October–January may be substantially influenced by unpredictable political and military developments and by the course of prices of other commodities; but such appraisal of the outlook for prices as is now possible must turn chiefly on the question of whether severe competition for export sales from existing surpluses is likely to re-emerge. The outcome will depend partly on governmental policies not yet made known. The available evidence, however, suggests to us that prices in North America are more likely to decline 5–10 cents below the levels of mid-September than to have a sustained advance above those levels.

Trade and Consumption, 1938–39[1]

In determining the total volume and distribution of international trade in wheat during the past crop year, governmental policies and actions played a larger part than in any previous year since the World War. Governments of leading exporting countries competed for markets through direct and indirect subsidization of wheat exports. Governments of most importing countries continued in force measures restrictive of wheat consumption, but several made heavy extra purchases of import wheat for security reserves.

Signs of expansion of the role of government appeared early. In September 1938 we observed: "The outlook for international trade in wheat depends, perhaps more heavily than ever before in peace times, upon unpredictable governmental policies and action." But since the determining governmental actions were truly unpredictable, recognition of the increased importance of governmental decisions was of little aid to accurate forecasting.

All of the principal trade forecasts published during the first half of 1938–39 proved too low by 50 to 100 million bushels. The extent to which European governments would choose to build up emergency reserves of wheat was underestimated. Overestimated were the limitations upon Chinese and Manchurian imports arising from the military,

[1] This subject will be treated more fully in our *Review of the Crop Year*, to be published in December. In the present discussion, emphasis is placed upon developments during May–July.

exchange, and trade measures of the Japanese government. Both European and ex-European imports thus proved larger than anticipated. World exports proved relatively larger still, in part because these were especially heavy in June–July and therefore could not be fully recorded in import statistics, in part because of factors not at present understood.

World wheat exports.—Now estimated at 643 million bushels in terms of net exports, 601 million in terms of Bromhall's shipments,[1] world trade in wheat in 1938–39 was the heaviest since 1931–32. The total presumably would not have reached the 1936–37 level (608 million bushels for exports and 595 million for shipments) if immediate consumption requirements and commercial stocks alone had been involved; but the added demand for European security stocks more than offset the heavier consumption requirements of 1936–37.

The relatively large world export movement of 1938–39 was concentrated unexpectedly and in extraordinary degree in the last quarter of the crop year. Never before in postwar years had May–July shipments of wheat represented so large a percentage of the crop year's trade; never before had the seasonal decline in world shipments from January–April to May–July been so small. This development, strikingly reflected in Chart 1 (p. 4), was mainly due to heavy governmental import buying late in the crop year for governmental reserves in Great Britain and several other European countries. Through May there was an added heavy demand from the Orient; but this rapidly subsided in early June, mainly in response to a sharp decline in the Shanghai exchange rate, but partly as a result of the Tientsin incident and as a seasonal reflection of the approaching Chinese harvest.

Argentina and Canada seem to have benefited most from the heavy end-year demand, though Australia, the United States, and several of the Danube countries shared in the enlarged export movement. May–July shipments, in total exceeded only six times during the past twenty crop years, were unprecedentedly large from the Danube basin, abnormally heavy from Argentina, and above recent five-year averages from Canada and the United States. In contrast, Russian and Indian shipments were negligible, and Australian exports were distinctly moderate.

Total crop-year net exports, extraordinarily and unexpectedly large in relation to estimated and reported world net imports,[2] were distributed by sources as tabulated, with comparisons, in million bushels. As compared with

Aug.-July	Total	U.S.	Canada	Australia	Argentina	Lower Danube	USSR	Others[a]
1932–33.....	631	33	264	150	132	12	17	23
1933–34.....	555	29	194	86	147	35	34	30
1934–35.....	542	...[b]	165	109	182	22	2	62
1935–36.....	526	...[b]	254	102	70	25	29	46
1936–37.....	608	...[b]	195	102	162	89	5	55
1937–38.....	554	118	87	126	72	54	43	54
1938–39.....								
Forecast[c]	585	105	145	90	105	73	37	30
Reported[d]	643	102	165	96	124	80	34	42

[a] India, Morocco, Algeria, Tunis, Turkey, Iraq, Iran, Egypt, South Africa, Uruguay, Chile, Japan, Chosen, and various countries of Europe in years when these were net exporters.
[b] Net imports.
[c] In mid-May.
[d] Partly estimated. See Table VIII for details.

earlier years of the past two decades, exports were exceptionally large only from the Danube basin. At 80 million bushels, these were not far from the peak exports of 1936–37; but, whereas in that year all four Danubian countries participated in the large export movement, in 1938–39 Rumania and Hungary alone shipped unusually large quantities.

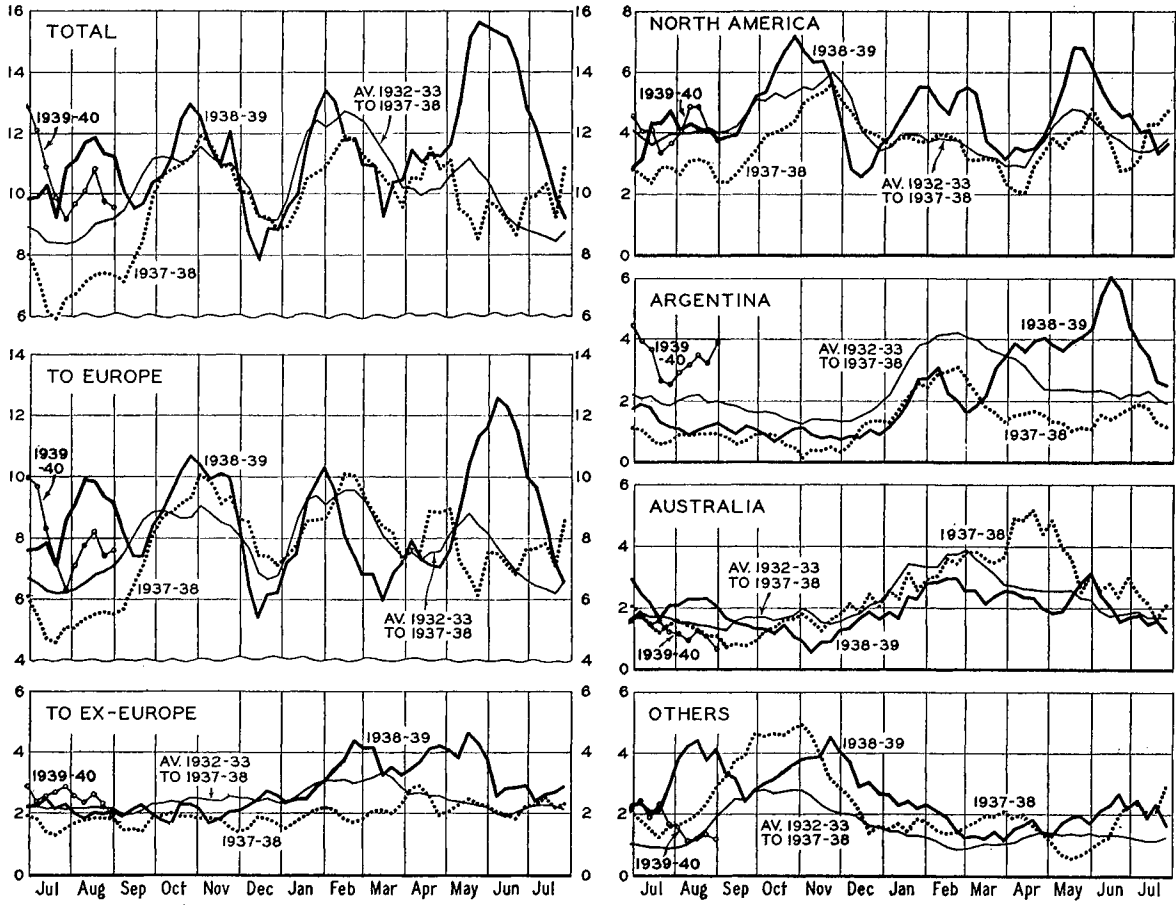
Argentina's exports, although neither strikingly large nor small as compared with many former years, were abnormally light in relation to her very large exportable surplus, This is apparent from the following tabulation, in million bushels and percentages. During August–December 1938 Argentina had little old-crop wheat for export; but when her huge new crop became available in December–

[1] This exceptionally large difference between world net exports and Broomhall's shipments mainly reflects differences in the two reported trade series for North America and "other" countries. Broomhall's data for 1938–39 apparently understate, by a larger amount than usual, (1) Canadian and American exports overseas and (2) shipments from miscellaneous "other" countries, some of which are apparently not covered at all in his series.

[2] See p. 5.

CHART 1.—INTERNATIONAL SHIPMENTS OF WHEAT, WEEKLY FROM JULY 1938, WITH COMPARISONS*

(Million bushels; 3-week moving averages)



* Broomhall's data; see Table VII.

January, exportable supplies were raised to a level higher than in any preceding year except 1928–29. Nevertheless, January, February,

Aug.-July	Exportable supplies	Net exports	Percentage exported
1928–29	352	222	63.1
1929–30	216	151	69.9
1930–31	205	125	61.0
1931–32	205	140	68.3
1932–33	207	132	63.8
1933–34	265	147	55.5
1934–35	267	182	68.2
1935–36	135	70	51.9
1936–37	213	162	76.1
1937–38	137	72	52.6
1938–39	299	124	41.5

and March passed without reflection of the large supplies in the Argentine export movement (Chart 1). During those months the Argentine Grain Regulating Board accepted farmers' deliveries[1] at 7 pesos per 100 kilos (roughly 60 cents per bushel through mid-August), basis Buenos Aires, without pressing sales of wheat on the international market where c.i.f. prices were scarcely higher. Late in March, however, Argentine shipments suddenly increased, and during the next four months were maintained at a notably high level, seasonality considered. The heavy Argentine shipments of April–July, exceeded only by corresponding shipments in 1924 and 1929, appear mainly to have represented board sales (partly on special intergovernmental

[1] The correspondent of the Canadian Dominion Bureau of Statistics in Buenos Aires reported that through March the board was believed to have purchased the "great bulk" of the crop. By the end of June the boards' purchases were placed at about 257 million bushels and by the end of August at 308 million.

deals) made at prices as high as or higher than were asked in earlier months. The decline of crop prospects in North America during late April and May gave the board an opportunity to sell huge quantities of wheat at moderately increased prices to merchants and exporters who saw a chance for profit through the greater advance in prices in North America and Liverpool. It was these sales mainly that were reflected in the near-record shipments from Argentina during June.

Australian exports in particular, but also exports from the United States and Canada, were larger in relation to domestic exportable supplies than would normally have been expected in a year of heavy world wheat surplus. Australian exports, drawn from distinctly moderate domestic supplies, were encouraged mainly by the heavy demand for wheat imports in the Orient. Indeed, during August–July Australia shipped less wheat to Europe than in any other recent year with the possible exception of 1934–35.

United States exports also benefited from the improved Oriental demand; but probably most of the Oriental as well as much of the non-Oriental sales effected in this country would not have taken place in the absence of special export stimulation. Some 85 to 90 per cent of all United States exports in August–July moved under governmental subsidy. In the absence of the export program, commercial shipments would certainly have been larger, but total net exports would probably have fallen far below the final figure reported.[1] Through June 30, 1939, the government's subsidy on export sales made under the official export program averaged about 29 cents a bushel for wheat grain and 22 cents a bushel for wheat exported in the form of flour.[2]

The volume of Canadian exports was determined in large measure by the selling policy of the Canadian Wheat Board, which received at the legal minimum price practically all of the wheat marketed in Western Canada. Until a record of the board's export sales becomes available, its policy cannot be adequately analyzed. At the moment it seems that throughout the year, though perhaps especially after early May, the board chose to sell freely rather than to carry extremely burdensome stocks into 1939–40.

Distribution of imports.—Reported world net imports in 1938–39 differed less strikingly from earlier forecasts than did reported world net exports. Significant fractions of the heavy June–July exports were not recorded as imports until after the close of the crop year. In addition there are differences, as yet unexplained, between net-import and net-export statistics. The margin between total net imports and total net exports (adjusted for changes in stocks afloat and in comparable positions) was strikingly larger in 1938–39 than in any other year on record.[3] Such margins are quite unpredictable, and the large annual variations cannot be explained even in retrospect.

The general distribution of European and non-European imports in 1938–39 is shown on page 6, with comparisons, in million bushels. Perhaps most striking are the increases indicated in British and Chinese imports during the past crop year. These increases afford striking evidence of three underlying forces that were operating to raise the imports of a large number of countries: (1) intensification of war danger in Europe, (2) serious crop deficiencies in the Far East, and (3) notably low international wheat prices.

[1] In the summer of 1938, estimates of the Department of Agriculture indicated that without an export subsidy wheat and flour exports in July–June 1938–39 would probably not exceed 40 to 50 million bushels. This contrasts with actual July–June net exports of 109 million.

[2] U.S. Department of Agriculture, *The Wheat Situation*, July 24, 1939, p. 8.

[3] Comparable data, available only since 1932–33, are summarized below in million bushels:

Aug.–July	Net imports		Change in stocks[b]	Calculable demand[c]	Total net exports	Difference
	Europe[a]	Non-Europe[a]				
1932–33	442	185	—10	617	631	14
1933–34	395	146	+ 2	543	555	12
1934–35	375	155	—16	514	542	28
1935–36	356	158	+11	525	526	1
1936–37	459	130	—10	579	608	29
1937–38	406	118	+ 8	532	554	22
1938–39						
Forecast[d]	420	145	— 4	561	585	24
Reported	442	151	+ 4	597	643	46

[a] Net imports of net-importing countries without deduction of net exports of any net-exporting countries. For distribution of imports in 1938–39 see text tabulation, p. 6.

[b] Change in stocks afloat to Europe and in stocks of United States wheat in Canada and of Canadian wheat in the United States.

[c] Sum of three preceding columns.

[d] In mid-May.

European net imports, now put at 442 million bushels, would probably not have exceeded 375 million if various European nations had not felt the pressure to build up war stocks (p. 10). On the other hand, even existing incentives to establish such accumulations

Country	1935–36	1936–37	1937–38	1938–39 forecast[a]	1938–39 reported[b]
British Isles	220	212	208	225	247
Germany, Austria, Czecho-Slovakia[c]	9	42	48	46	43
Italy	5	57	4	12	13
France	8	12	16	1	...[d]
Belgium, Netherlands	61	61	61	64	68
Switzerland	17	18	15	18	17
Scandinavia, Baltic, Poland[c]	21	20	18	19	18
Greece	15	22	18	15	13
Spain, Portugal	...[d]	15[e]	18[e]	20	23[e]
Total Europe[c]	356	459	406	420	442
Brazil	37	39	37	39	39
China	8	1	9	23	28
Manchukuo	14	5	6	15	13
Japan	5	4	...[d]	...[d]	...[d]
West Indies, etc.[f]	13	12	13	13	13
United States	31	17	...[d]	...[d]	...[d]
Other non-Europe	50	52	53	55	58
Total non-Europe[c]	158	130	118	145	151
Grand total[c]	514	589	524	565	593

[a] In mid-May.
[b] For some countries including our trade approximations for unreported monthly figures. See Table VIII.
[c] Without deduction of net exports of net-exporting countries.
[d] Net exports.
[e] Including our approximation for Spanish net imports.
[f] Canadian and United States exports to the West Indies and shipments of the United States to her possessions.

might have been reflected in smaller import purchases of wheat for storage, if international wheat prices had been substantially higher. And under such conditions, imports would also have been lessened by a lighter demand for wheat for feeding in northwestern Europe (p. 7).

Small wheat crops in China and Manchuria, low international wheat prices, and the disruption of internal trade by military operations tended markedly to swell non-European imports of wheat in 1938–39. Only in 1928–29 and in the three years ending with 1932–33 had non-European takings been substantially larger, though in 1934–35 and 1935–36, when the United States ranked as a net importer, equally large or slightly larger imports were recorded. The high total for 1938–39 reflected not only big increases in Chinese and Manchurian imports (supplied partly by Japan, though mainly by Australia and the United States) but also small increases in the import takings of many other countries. Among these were Brazil, the East Indies, India, the Philippine Islands, New Zealand, South Africa, and Palestine. Some of the increases were in response to low international wheat prices; others (as for New Zealand and South Africa) reflected unusual deficiencies in domestic supplies.

Both European and ex-European imports were concentrated more heavily than usual in the last quarter of the crop year. It was then that Britain added most heavily to her war reserves; it was then that Spanish and Italian imports were seasonally large; it was then (and in April) that Chinese and Manchurian imports were at their crop-year peak.

Wheat consumption.—Calculations of statistical disappearance (p. 21) in the world excluding China, Russia, India, and Turkey suggest unprecedentedly heavy utilization of wheat in 1938–39. Food use and feed use alike were undoubtedly stimulated by the low level of prices. The indicated total (derived from crops plus inward carryovers and in-shipments from Russia and Turkey, minus outward carryovers) is about 3,485 million bushels—200 million more than in 1937–38, and a little more than in the peak years of 1930–31 and 1931–32. The data, however, are by no means precise and may exaggerate the relative level of utilization in 1938–39; not all of the indicated increase between 1937–38 and 1938–39 can be accounted for at present in detailed calculations of utilization by countries.

Approximate wheat utilization in the principal consuming areas, based mainly on initial stocks, crops, net imports or net exports, and outward carryovers of individual countries, is shown in the following tabulation in million bushels. The regional distribution of disappearance was most like that of 1930–31. But in Europe ex-Danube, the four chief exporting

countries, and the present Japanese-controlled area of Japan, Manchukuo, and Chosen, the statistical disappearance was significantly lower in 1938–39, whereas it was substantially higher in the Danube basin, northern Africa, and various Near Eastern and South American countries.

Aug.-July	Europe ex-Danube	Danube, North Africa[a]	U.S.	Other chief exporters[b]	Japanese Empire[c]	Brazil, Chile, etc.[d]	Near East[e]	Shipped outside[f]
1930–31..	1,654	403	747	284	...[g]	92	25	80[h]
1931–32..	1,664	404	753	257	...[g]	97	22	100[h]
1932–33..	1,648	335	718	257	122	89	19	106
1933–34..	1,665	400	628	262	128	110	24	72
1934–35..	1,679	361	653	246	113	92	24	74
1935–36..	1,666	371	660	269	113	101	27	63
1936–37..	1,620	389	709	253	95	101	23	54
1937–38..	1,605	411	699	255	98	107	28	63
1938–39..	1,641	446	721	274	92	113	31	84

[a] Hungary, Yugoslavia, Rumania, Bulgaria, Morocco, Algeria, Tunis, Egypt.
[b] Canada, Argentina, Australia.
[c] Japan, Manchukuo, Chosen.
[d] Crops and net trade of Brazil, Chile, Uruguay, Peru, Mexico.
[e] Syria and Lebanon, Palestine, Cyprus.
[f] Estimated exports from the "world ex-USSR" (as here defined) to outside areas such as China, West Indies, etc.
[g] Not available.
[h] Approximate; not strictly comparable with later years.

For Europe ex-Danube, the indicated reduction in wheat disappearance between the early 'thirties and 1938–39 is probably more apparent than real. It is true that measures restrictive of wheat consumption were more numerous and more stringent in 1938–39, and that less wheat was available for consumption in war-torn Spain. But the population of Europe ex-Danube had increased by something like 17 million persons since 1930–31; import wheat prices on free markets were at or near record-low levels, encouraging feeding of wheat in those countries (fewer in number in 1938–39) that allowed the low international wheat prices to be reflected on their domestic markets; and the French government was attempting to increase domestic wheat consumption by denaturing some 7 to 9 million bushels for feed and by enforcing a slightly lower extraction rate for flour. Under these conditions, it is hard to believe that the amount of wheat actually consumed in importing Europe was appreciably smaller in 1938–39 than it had been in 1930–34. The statistics indicate a reduction, primarily because French wheat production figures from 1936 have been 25 to 30 million bushels too low for comparison with earlier years.

In contrast, utilization data for the Danube basin have recently been comparatively too high, in reflection of changes introduced in methods of crop estimation in Bulgaria and Rumania in 1937. These changes may be responsible for a net increase of some 10 to 15 million bushels in the disappearance figures for the Danube basin; but as yet the magnitude of the change involved is not clear. Entirely aside from statistical evidence, there are indications that wheat production and consumption have tended upward in the Danube area over the past decade, and that both were notably heavy in 1938–39. Especially in Rumania and Yugoslavia, where corn is an important competing cereal for human food, the dearness of corn relative to wheat must have encouraged expansion of wheat consumption in the past crop year.

In northern Africa, in Near Eastern countries other than Turkey, and in South America ex-Argentina, growing populations and, in some countries, rising standards of living have been associated with somewhat similar recent upward trends in wheat consumption. The available statistics reflect not only these upward trends,[1] but also especially significant increases in wheat utilization in 1938–39. Low international wheat prices and, in several of the countries concerned, large domestic wheat crops, presumably encouraged both heavy consumption and stocks-building in the past crop year.

In contrast with the expansion of wheat consumption in most parts of the world, there was further significant decline in 1938–39 in the Japanese-controlled area of Japan, Manchukuo, and Chosen. Small 1938 crops were partly responsible; but more important were the prevailing severe restrictions on wheat imports—restrictions at least partly associated

[1] Probably the degree of actual change in consumption from 1930–31 is not properly reflected in the available statistics. In several of these countries statistical procedures are crude; and certain of the published production and trade series strongly suggest the possibility of incomparability over a period of years.

with the large foreign exchange requirements of Japan's military program in Asia. China, whose large imports of wheat in 1938–39 are reflected in the indicated substantial increase in shipments to outside areas, probably actually consumed less wheat than usual in 1938–39, because of her poor domestic crop.

For the four chief exporting countries the statistical evidence on wheat utilization is shown in more detail in Table IX. In each of these countries wheat disappearance in 1938–39 was at a higher level than in at least four of the five preceding years; but in the United States and Canada it was not so high as in 1930–31 and 1931–32, when feeding of wheat on farms reached record heights and more wheat was used for seed.

In Australia and Argentina, the estimated record or near-record disappearance figures for 1938–39 imply about the usual annual increases in the amounts milled for domestic consumption, some slight reduction in seed use of wheat from 1937–38, and an increase in the small quantity of wheat diverted to animal feed. In total, however, the estimated increases in wheat utilization in these two countries total only 8 million bushels.

Much larger changes are indicated for Canada and the United States. In Canada, wheat millings for domestic retention approximated 48 million bushels—3 million higher than the previous record. In some part, this heavy flour retention represented an addition to flour stocks; but the full increase can hardly be so explained. Tending further to swell the Canadian disappearance figure for 1938–39 were the large quantities of wheat used for seed and for feed on farms. In total, the calculated disposition items exactly equal the indicated total disappearance of wheat in Canada, leaving no positive residual for miscellaneous uses in 1938–39. This fact, together with reports on farm marketings in the Prairie Provinces, suggests that the 1938 Canadian crop may have been underestimated by about 5 million bushels, or slightly less than we earlier anticipated.

In the United States, as in Canada, the amount of wheat ground for domestic retention was unexpectedly large. At 103.8 million barrels, the domestic retention of flour was larger than in any year since 1932–33; but as much as a million barrels of this may have gone to enlarge flour stocks. Reduction in seed use of wheat from 1937–38, by roughly 17 million bushels, more than offset the indicated increase in domestic millings. The quantity of wheat fed on farms, however, was officially estimated to be the largest since 1931–32, and disappearance unaccounted for (including errors in standing crop, trade, and domestic disposition estimates) totaled 36 million bushels, as compared with an average of only 25 million in the preceding decade.

No such heavy disappearance for feed, miscellaneous uses, and errors was suggested by similar calculations of disappearance based on the official reports of stocks as of January 1 and April 1. The stocks estimates for April 1 and July 1, together with data on total supplies, millings, exports, and estimated sowings, indicate that wheat disappearance for feed, minor miscellaneous uses, and errors of estimation were as follows in 1938–39, with comparisons, in million bushels. The figures suggest that the increased disappearance in 1938–39 for feed and miscellaneous uses (including errors) was concentrated mainly in the last quarter of the crop year. This may be interpreted in any one of several ways: either (1) feed consumption was abnormally heavy in April–June 1939, or (2) April–June estimates of disposition (domestic millings, exports, and seed) were too low this year as compared with earlier years, or (3) wheat stocks as of April 1, 1939 were overestimated or reported more fully than usual, or (4) wheat stocks as

Year	July–Mar.	Apr.–June	July–June
1930–31	180	+ 5	185
1931–32	200	− 1	199
1932–33	172	−22	150
1933–34	128	−18	110
1934–35	108	+13	121
1935–36	112	− 6	106
1936–37[a]	151	−10	141
1937–38[a]	126	+10	136
1938–39[a]	139	+29	168

[a] Since 1936–37 utilization estimates have been calculated on the basis of July 1 stocks estimates which include less new-crop wheat than in most earlier years. This has had the effect of slightly lowering the figures for residual disappearance in July–March and of slightly raising the figures for April–June.

of July 1, 1939 were underestimated relative to the figures for preceding years.

Of these various possibilities, we think it most unlikely that the specified disposition estimates for April–June were seriously in error. More possible, but we think improbable in the light of evidence on grain-price relationships, is the hypothesis that there may have been abnormally heavy feed use of wheat in April–June 1939. Thus, the most plausible explanation seems to be that the reported wheat stocks of April 1 or July 1, 1939 were respectively either too high or too low as compared with earlier years. The recent attempt of the United States Department of Agriculture to exclude all new-crop wheat from reported July 1 stocks presumably explains part of the increased disappearance shown in the tabulation for April–June 1938 and 1939; but since the amount of new-crop wheat included in the stocks reports for most earlier years must have been very small, this change in statistical procedure can account for but a small part of the big increase in residual disappearance indicated for April–June 1939.

Large Old-Crop Carryovers

No feature of the world wheat situation of 1938–39 received more attention than the constant prospect for a near-record world carryover of old-crop wheat at the end of the year. No factor except the new-crop outturn is more important for 1939–40. Current stocks estimates as of about August 1, 1939 are shown below, with comparisons, in million bushels.

The total now indicated is only about 70 million bushels smaller than the estimated record carryover of 1934; excluding India and Japan, it is roughly 90 million bushels smaller. Never before has a single wheat crop added so heavily to the world carryover. Whereas the previous record crop of 1928 added about 250 million bushels, the bumper 1938 harvest resulted in an increase of over 500 million bushels, or more than twice as much.

Our present stocks estimates for 1939 reach a total not far below that suggested in May; but the distribution as between exporting and importing countries now appears strikingly different. The unexpectedly heavy absorption of import wheat by Europe in May–July reduced stocks in exporting countries, and increased stocks in importing Europe and on ocean passage to Europe. Furthermore, exporters' stocks were drawn down more than anticipated through the enlargement of shipments to China and other non-European countries whose stocks are not counted in the "world" total. Unexpectedly heavy domestic disappearance of wheat in the United States and Canada contributed to reduction of stocks in these two countries; but the effect of this development upon exporters' total stocks is partly offset in our current estimates as a result of upward revisions since May in the official crop estimates for Argentina and Australia. Because of these revisions our present estimate of August 1 stocks in the two Southern Hemisphere exporting countries is only 5 million bushels lower than our May forecast, although exports from these countries proved 25 million bushels larger than anticipated.

Position	1934	1937	1938	1939 forecast[a]	1939 estimate
United States[b]	274	83	153	275	254
Canada	193	33	24	130	95
Australia	85	41	50	55	50
Argentina	118	51	65	175	175
Total	670	208	292	635	574
Europe ex-Danube	377	212	185	320	363
Danube basin	55	28	24	75	70
North Africa[c]	10	10	12	16	14
Total	442	250	221	411	447
Afloat, etc.[d]	56	38	51	46	56
India, Japan	34	35	33	53	53
Grand total	1,202	531	597	1,145	1,130
Total ex-Asia	1,168	496	564	1,092	1,077

[a] In mid-May.
[b] As of July 1.
[c] Morocco, Algeria, Tunis, Egypt.
[d] Afloat to Europe and to ex-Europe; stocks of United States wheat in Canada; and stocks of Canadian wheat in the United States.

Exporting countries.—Although relatively large, aggregate wheat stocks in the four major exporting countries had in four earlier

years been larger still. Only Argentine stocks reached a new high total on August 1, 1939, a total which reflected both a near-record harvest and restrained post-harvest export selling on the part of the Argentine Grain Regulating Board. In contrast, Australian stocks were distinctly moderate, partly because Australia's 1938 crop was below average size, and partly because Australian exports, uncontrolled by any governmental agency, responded freely to the enlarged demand in the Orient.

The Canadian carryover in Canada, officially estimated at 95 million bushels, was substantially smaller than anticipated, and relatively low for a year of heavy world wheat surplus. In each of eight earlier years of surplus, the Canadian carryover on August 1 had stood materially higher. But in those years Canada had had much larger supplies of wheat for disposal and there was either greater private incentive or greater governmental pressure to hold stocks. In 1938–39 Canada's total wheat supplies were smaller than in all but three of the fifteen preceding years; and the Canadian Wheat Board apparently exercised no influence tending to restrain exports. Less important, but significant, in its influence upon stocks was the unexpectedly large domestic disappearance of wheat in Canada in 1938–39.

At 254 million bushels, the official estimate of the United States carryover was 21 million below our May forecast. The difference was not primarily due, as in Canada, to unexpectedly heavy year-end exports, but was associated with a much heavier domestic disappearance during April–June than had been anticipated (pp. 8–9). As noted above, it is conceivable that April–June consumption was lower and July 1 stocks somewhat higher than the official data imply. Nevertheless, the carryover was presumably smaller than in any of the five wheat-surplus years from 1929–30 to 1933–34, when total domestic wheat supplies were larger or net exportation or domestic consumption was lighter.

As anticipated, Danubian wheat stocks appear to have reached a near-record high level in 1939, in reflection of the bumper harvests of 1938 and despite unusually heavy exports from Rumania and Hungary. Within this area, relatively the largest stocks appear to have been located in Rumania and Bulgaria; but our stocks estimates for these two countries may not properly allow for the changes introduced since 1936 in their methods of crop estimation.

Importing countries. — From many standpoints the level and distribution of old-crop stocks in importing Europe is this year more important than the level and distribution of stocks in exporting countries. Under conditions of extended and prolonged warfare in Europe, military success or failure may depend partly upon the adequacy of stored grain supplies in the different countries. Although satisfactory data on European wheat stocks are not available, we present below for leading countries our approximations of wheat carryovers in 1938 and 1939, based upon crop and trade statistics, such incomplete data on stocks as are reported, and broad inferences as to wheat consumption. These approximations, in million bushels, refer to old-crop stocks on or about August 1. In general,

Country	1938 total	1939	
		Total	Months' supply[a]
United Kingdom	33	69	3.1
Germany, Austria, Bohemia-Moravia[b]	42	90	4.4
France[c]	25	92	3.7
Italy	30	40	1.7
Poland	6	10	1.7
Belgium, Holland, Switzerland	14	25	2.6

[a] Estimated number of months' requirements for a low normal level of total consumption (including seed and some feed).

[b] Estimates for area included within new boundaries.

[c] For purposes of comparison with other countries, French stocks are here expressed on a new basis, roughly 6 million bushels higher than that used for French stocks included in the tabulation on p. 9.

the indicated increases in stocks between 1938 and 1939 are probably more accurate than the absolute levels. Official German stocks statistics for the old Reich show an increase of 46 million bushels during 1938–39. The French Ministry of Agriculture, which has usually underestimated increases in French stocks in years of domestic surplus, admits an increase

of 66 million bushels. In the United Kingdom, where port stocks alone increased 11 million bushels, the House of Commons was informed in August that the amount of wheat stored together with the new harvest would be more than sufficient without imports to supply bread for six months—a statement that checks reasonably well with our stocks estimate.

As judged only by the number of months' supply of wheat or bread-grain carryover on August 1, 1939, Germany would appear to be in the best position for war.[1] But old-crop stocks cannot properly be considered alone; they must be considered along with the new harvests, and also in the light of the feasibility of imports under war conditions. These more complicated factors are treated in the discussion of the outlook for trade (pp. 22–25).

Visible supplies.—As had been anticipated, "world" visible supplies declined slowly in April–June; and, as in the four preceding years, increased during July in response to heavy new-crop marketings in the United States. As of August 1, however, the level of world visibles was lower than in any of the five years from 1930 to 1934, whereas the total world stocks were lower than in 1933 and 1934 only. This difference was mainly due to the fact that the large total stocks of 1939 were concentrated less heavily in North America than had been the case in most earlier surplus years (pp. 9–10).

Especially striking in contrast with earlier years were the notably large stocks in British ports. At 25.5 million bushels on August 1, these stocks stood higher than at the corresponding date in any year since the World War, and during August there was a further increase to 29 million bushels—a near-record high total for any month.

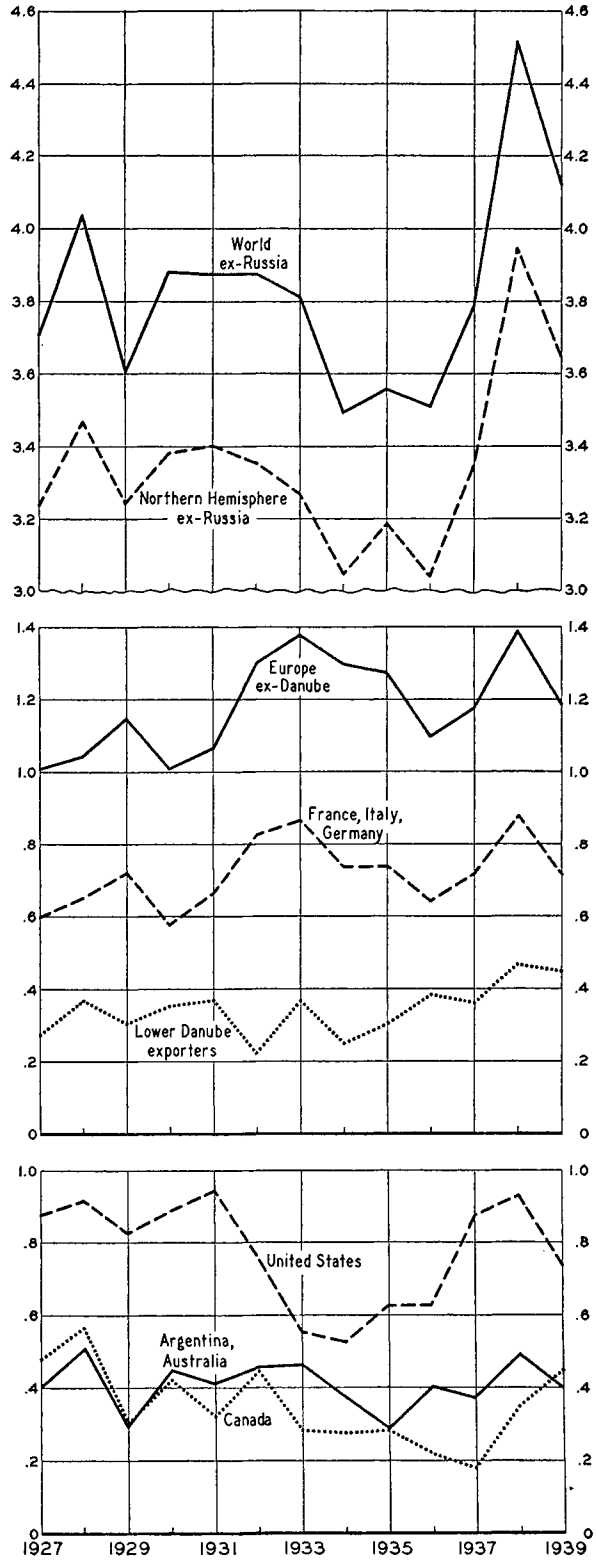
Crops of 1939

In 1938 the world ex-Russia harvested an enormous wheat crop almost 500 million bushels larger than the previous record crop of 1928. In 1939, a lower outturn is naturally in prospect; but the reduction may prove to be well under 400 million bushels, leaving

[1] As of July 31, rye stocks in the old German Reich were officially estimated at 105 million bushels, as compared with 40 million a year earlier.

Chart 2.—Principal Wheat Crops, 1927–39*

(Billion bushels)



* Tables I and II show some upward revisions for 1939.

the 1939 harvest to rank as the second largest ever reported. In the Northern Hemisphere, present indications are for a large European crop (reflecting a heavy outturn in the Danube countries but not elsewhere), a large Canadian crop, but only a moderate crop in the United States (Chart 2, p. 11). The sown acreage in this hemisphere was strikingly reduced for the 1939 crop (mainly in the United States), but the yield per acre now promises to be nearly as high as last year.

United States.—Sown on an area somewhat below the average for the preceding decade and 10 million acres smaller than that for 1938, the United States winter-wheat crop suffered markedly from dry weather in its early stages, and on December 1, 1938 was reported 8 points below the ten-year average condition of 80 per cent. Abandonment to May 1 (estimated at 15.7 per cent) was considerably heavier than in 1938, but significantly below the 1928–37 average which included several years of severe drought. From May 1 to August 1 monthly official forecasts of the expected yield per harvested acre of winter wheat were as follows in bushels: 14.0, 13.4, 13.9, and 14.3. Abnormal heat and drought in May considerably reduced the prospective yield; but during June, more adequate rains and seasonal temperatures improved the outlook. July, characterized by hot, dry weather, was generally favorable for ripening and harvesting; and early threshing returns were higher than had been expected. The yield per acre indicated for winter wheat as of August 1 was the highest suggested during the course of the season. But since the estimate of winter-wheat acreage was reduced in the July report, the production indicated as of August 1 was barely higher than the official production forecast of early April.

The United States spring-wheat crop was seeded relatively early on an area about 4 million acres smaller than the average planted acreage of 1928–37. Hot, dry weather in May retarded growth and resulted in short, uneven stands. As of about June 1 three private experts forecast the crop at 184 million bushels; but the corresponding official figure was only 145 to 170 million bushels. Cooler weather and above-normal precipitation in June brought improvement reflected in average private estimates of 196 million bushels and an official forecast of 179 million. During the first two or three weeks of July there was further improvement, which was not fully wiped out by the setback from hot, dry weather later in the month. Nevertheless, three private estimates averaged 17 million bushels lower on August 1 than on July 1, reflecting a shift to the lower official acreage estimate published July 10. The August private estimates for spring wheat were very close to the official forecast of 181 million bushels. With weather conditions in August neither strikingly favorable nor unfavorable, there was little change in the outturn indicated as of September 1, when the official figure was placed at 185 million bushels.

In total, the United States wheat crop of 1939 is now estimated at 736 million bushels. This implies a crop almost 200 million bushels smaller than that of 1938 and the sixth smallest in postwar years. The reduced production was the result of about an average yield per acre on a sown area moderately below any recent long-time average and 16 million acres below the average for the two preceding years.

Canada.—Officially estimated as of August 31 at 449 million bushels, this year's Canadian wheat crop is the largest since 1928 and the fourth largest on record. The yield per acre was not significantly above long-time averages exclusive of the major drought years of 1933–37; but the sown area was of near-record size, exceeded only in 1932. Private reports suggest that the outlook for the Canadian harvest improved markedly during June and early July, but later worsened under the influence of hot dry weather. The monthly official condition figures from May 31 to July 31 were as follows in terms of percentages of a long-time average condition: May 31, 94; June 30, 102; July 31, 89. These figures do not show the improvement that occurred during the first week or ten days of July, nor the further deterioration that came during the first week of August; but the weekly telegraphic crop reports clearly outline this general course of development. The second week of August brought some improvement in outlook, and

later reports stated that in many areas threshings were turning out better than expected.

Other Northern Hemisphere exporters.—In the Mediterranean export area, which includes the Danube basin, Turkey and other Near Eastern exporters, and French North Africa, 1939 harvests were apparently notably large but mostly not of record size. Early estimates suggest a total Danubian crop of about 457 million bushels, 9 million smaller than last year but otherwise the largest on record. In northern Africa the reported outturn is unprecedentedly large, but rust and harvest losses are said to have resulted in a reduction of yield not yet reflected in the official estimates. The Turkish crop, if private estimates of 150–152 million bushels are confirmed, is second in size only to last year's record harvest. For other Near Eastern countries, the incomplete crop data now available suggest an outturn somewhat above the previous record of 1938.

In the USSR, planned plantings of feed and forage crops were expanded in 1938–39 at the expense of the area under the bread grains. This factor, together with low subsoil moisture, heat, and drought in part of the spring-wheat territory, went far to offset the reported favorable development of the winter cereal crops in the southern regions. Although no official crop estimate has been issued, it is rather generally believed that Russia secured only a moderate crop of bread grains this year. Supporting this view were the reported small wheat shipments during July–August—a development that would seem inconsistent with the large winter-wheat crop in the Ukraine, if heavy yields of spring wheat had been anticipated.

In the Orient, India is reported to have secured a fairly good but not bumper outturn of wheat, while Japan (a net exporter in the past two years) claims a record harvest, almost 10 million bushels larger than her mediocre crop of 1938.

Europe ex-Danube.—At present, fewer official crop estimates are available for the countries of importing Europe than is usual in mid-September. It is not clear whether official figures will be released this year for Germany, France, and some other countries which had not published estimates before the outbreak of war on September 1.[1]

Despite the uncertain validity of many of the individual crop estimates presented in Table II, there is little reason to doubt that the total wheat crop in Europe ex-Russia ex-Danube was distinctly moderate in size—probably between 150 and 200 million bushels smaller than the record harvest of 1938. The incomplete data may be interpreted to indicate that the harvested wheat area declined in 1939 for the fourth successive year and that the average yield per harvested acre was fairly high, though significantly lower than in 1938.

In contrast with the situation in 1938, the months of May–July 1939 brought no big change in evaluation of the prospective harvest in importing Europe. Even the general distribution of the crop seems to have turned out about as was indicated in May. The countries of northwestern and central Europe, which had suffered most severely from freezing temperatures during the winter, are currently reported to have witnessed the largest reductions in outturn as compared with 1938. On the other hand, most of the countries of southern Europe, whose crops appeared promising in May, have reported large harvests—as large as or larger than those of 1938.

Southern Hemisphere.—Although it is still too early to anticipate the size of the two major Southern Hemisphere crops, it seems almost certain that Argentina will harvest a substantially smaller crop than she did last year, while Australia may do no better than a year ago. Both countries are reported to have reduced their sown wheat acreage—Argentina by about 11 per cent and Australia by 5 per cent. On the areas now indicated, average yields would result in a crop of only 232 million in Argentina and one of 155 million in Australia. Since crop conditions are about average in Argentina and slightly higher in Australia, we tentatively place our approximations of these crops at 235 and 160 million bushels, respectively, for purposes of calculation of a world crop figure.

[1] As of September 20, Germany, Poland, France, Great Britain, India, Australia, New Zealand, Union of South Africa, and Canada are officially at war. Russia, with troops in Poland, is officially neutral.

Prices and Spreads

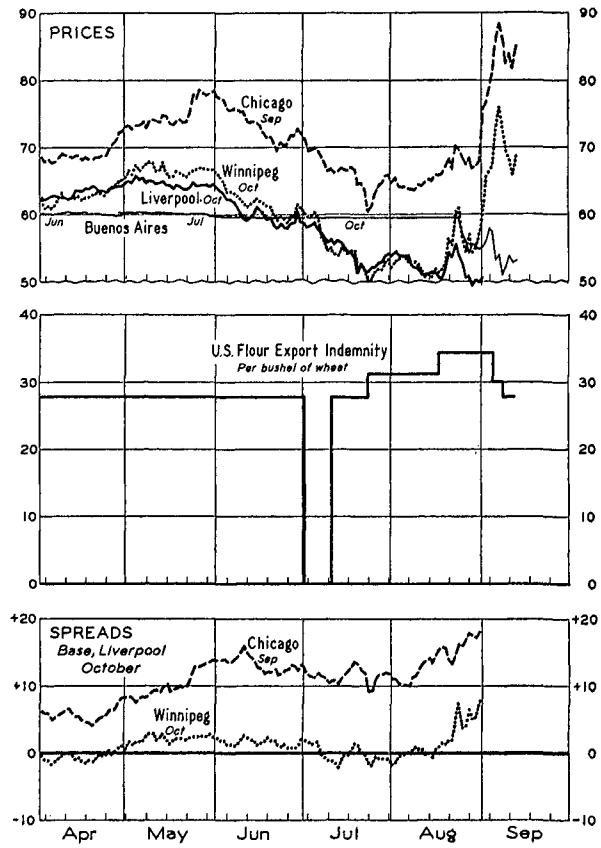
Wheat prices were supported during May, and in the United States rose substantially, under the influence of prospects for some lightening of the burden of wheat surplus. But crop prospects improved greatly, especially in Canada, and private holders of Argentine wheat pressed sales, with the result that during June 1–July 24 futures prices at the principal markets fell 20–25 per cent. Their course during this decline and subsequently was influenced appreciably by anticipation of effects from the wheat loan and export subsidy programs of the United States. From mid-August, prices fluctuated under the influence of war fears, until, with the commencement of hostilities on September 1, an advance started in North American markets such as had never before been witnessed. Moderate reactions from this advance were followed by partial recovery that left Chicago futures prices on September 16 about 20 cents higher than before the war scares started, and Winnipeg about 25 Canadian cents, or 18 United States cents, higher.

May.—The October wheat future at Liverpool, at its high of nearly 66 cents per bushel on May 2, showed an advance of just 2 cents from its closing price on April 24, as compared with advances of 5 and 4 cents in corresponding futures at Chicago and Winnipeg, respectively. Free selling by the Argentine Grain Regulating Board at prices only slightly above those prevailing in late April tended to check price advances in all markets. At Liverpool this restraining influence was strong from the outset, and at Winnipeg the restraint soon became almost equally effective. It was chiefly responsible for the nearly horizontal course of prices at these markets through most of May (Chart 3). At Chicago, however, prices of new-crop futures were able to advance moderately to mid-May under continuing reports of crop damage, and during May 23–26 rose nearly 5 cents per bushel as the winter-wheat crop suffered from severe heat.

During the first half of May, Moody's index of prices of sensitive commodities in the United States rose strongly as wheat prices advanced (Chart 4). This correspondence seems to have no significance deeper than the fact that prices of a number of commodities were affected much as were wheat prices, or more strongly, by dry weather in agricultural areas of the United States. During the remainder of May–August there was no important correspondence between movements of wheat prices and movements of the price index number; and in no part of the period did there appear a significant relation between changes in wheat prices and changes in prices of industrial stocks. Until European war emerged as a factor, influences such as tend to cause similarity in price movements of wheat, other sensitive commodities, and stocks appear not to have been significant price factors.

Chart 3.—Wheat Futures Prices and Spreads, and United States Flour Export Indemnity Rates, Daily from April 1939*

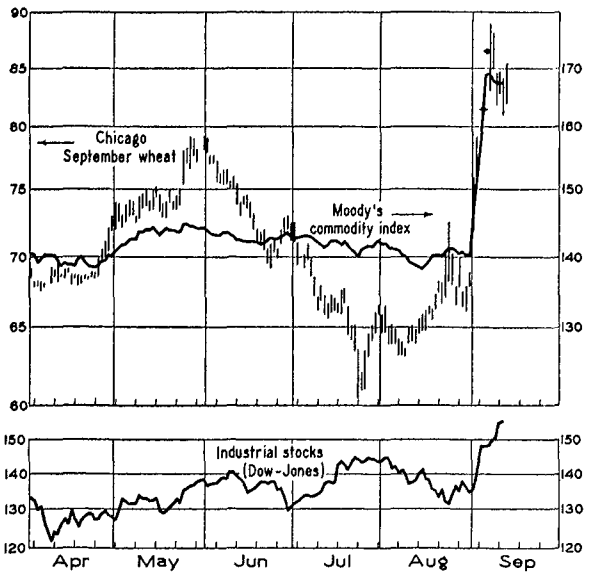
(U.S. cents per bushel)



* Prices at the close for Chicago and Winnipeg; opening next morning for Liverpool. Export indemnity rates from east of the Rocky Mountains, per barrel (p. 21), converted at 4.5 bushels per barrel.

CHART 4.—CHICAGO SEPTEMBER WHEAT PRICES AND INDEX NUMBERS OF PRICES OF SENSITIVE COMMODITIES AND STOCKS, DAILY FROM APRIL 1939*

(Cents per bushel; per cent; logarithmic vertical scales)



* High and low prices of the Chicago future; index of closing prices of 15 sensitive commodities, base December 1931 = 100, compiled by Moody's Investors Service; index of closing prices of 30 industrial stocks, compiled by Dow-Jones News Service. The scales represent a change of 10 per cent in stocks prices by the same vertical distance as a change of 5 per cent in either the wheat price or the Moody index. Circles on September 5 and 6 indicate wheat prices continuously at the maximum permitted level throughout the day's session.

June 1–July 24.—From its opening price on June 1, equivalent to 64½ cents per bushel, the Liverpool October future declined over 13 cents, or nearly 21 per cent, to the amazingly low level of 51⅛ cents at its opening on July 21. In sterling, the October future fell to 3*s.* 7¾*d.* per cental, and the July to 3*s.* 4⅞*d.* Previously the record low for any Liverpool future was 3*s.* 8*d.*, established in early September 1931, before devaluation of the pound. At Chicago and Winnipeg the price decline continued through July 24 and was 4 or 5 cents greater than that at Liverpool.

The price decline of June 1–July 24 was initiated by weakness at Winnipeg, under the influence of improving prospects for the Canadian crop and indications that Canadian wheat was high in price relative to Argentine, and it was carried forward by progressive reductions in prices at which Argentine wheat was offered on the British market.[1]

In May there was widespread feeling that the approaching crop year would see a substantial reduction in the world wheat surplus. Prices of Canadian wheat perhaps more than prices of Argentine reflected this feeling. The outcome, however, depended in large part on the progress of the Canadian crop, which in mid-May was threatened by the scarcity of soil moisture over much of the Prairie Provinces. From the latter part of May, however, most of the spring-wheat areas of Canada were favored with generous rains and generally moderate or low temperatures. Week by week to early July, the outlook for the Canadian crop improved. Generally clear weather and moderate temperatures during early July were considered favorable, but after about July 10 continued light precipitation and abnormally high temperatures resulted in progressive crop deterioration that was apparently most severe during the last week of July.

Although improvements in Canadian crop prospects were the dominant influence underlying the price decline of June 1–July 24, price movements were not closely associated in detail with weather news. Winnipeg prices declined abruptly in the first few days of June, largely in belated recognition of the beneficial effects of rains during the previous ten days or two weeks. Prices of Argentine wheat were reduced competitively, to be followed by further declines in Canadian prices and then again in Argentine prices.

Statements of the policy of the Argentine

[1] Under these circumstances, most of the changes in futures prices at Liverpool came as responses to price changes during trading sessions in North American markets or in response to changes in Argentine sellers' offers made between the close of one trading session at Liverpool and the opening of the next. In consequence, they appeared in Liverpool futures prices chiefly as changes between closing quotations and opening prices next morning. Price changes during trading sessions at Liverpool prior to opening of the North American markets each day were generally small and showed no significant trend. In the North American markets price changes throughout May–August occurred almost wholly during trading sessions, overnight changes being inconsequential. The chart of cumulated interval price changes which we usually publish shows no features deserving of special study in the period covered by this survey and is accordingly omitted.

Grain Regulating Board which appeared in the trade press,[1] and such data as are available on prices quoted by the board, indicate that it tried to resist the price decline. Merchants had bought large quantities of wheat from the board during May, however, when crop prospects suggested a probability of advancing prices, and this wheat tended to be pressed in import markets as prices weakened. During June quotations in the British market on Argentine wheat afloat went to increasing discounts under quotations on wheat not yet shipped (p. 19). It may be questioned, however, whether all of the Argentine wheat shipped during June and July was sold by the grain board prior to commencement of the price decline in June. If it should be shown that the grain board made substantial new sales for export to Europe in June or July while wheat that it had previously sold was being offered for resale at distressed prices, it would seem not unreasonable to consider that the grain board itself contributed significantly to the price decline. The facts in this respect remain unclear.

Price recoveries on June 14 and 15, supported by stiffening of price offers by resellers of Argentine wheat and good export sales of Canadian wheat, were short-lived, but in late June the price decline seemed to have come to an end. The Winnipeg October future fluctuated around a level of 60 cents per bushel from June 22 to July 6.[2]

A second period of progressive competitive price reductions was initiated on July 7. Its beginning was attributed largely to expectation that the official Canadian crop report to be issued after the close on that day would show excellent crop prospects. The report amply fulfilled these expectations, giving concrete and authoritative evidence of the extraordinary promise of the crop.

The course of prices at Chicago and Winnipeg during this decline was strongly influenced by appraisals of the probable price effect of the governmental wheat loan program in the United States.[3] Largely influenced by expectations of price support from the loans, the Chicago September future fluctuated narrowly at slightly over 66 cents during July 10–19, and Winnipeg prices, influenced also by continued hot dry weather, held almost equally steady. Confidence tended to be weakened, however, by continuing severe price declines at Liverpool, where the near future on July 17 fell below the previous record low for any Liverpool future. As Liverpool continued to decline, confidence in North America finally collapsed, Chicago prices declining about 6 cents per bushel and Winnipeg 4 cents during July 20–24.[4]

The rapid decline at Liverpool during July 15–21 was precipitated by renewed offers of United States wheat under subsidy,[5] which were followed by further reductions in prices of Argentine wheat, evidencing a prospect of continuing intensified competition between

[1] Notably in the *Times of Argentina*.

[2] Rains that delayed harvesting of the winter-wheat crop in the United States, unexpected lightness of hedging pressure in the United States, and renewal of fears in connection with Germany's claim to Danzig were significant price factors on individual days, but probably had little bearing on the general course of prices.

[3] Announcement on May 20 that loans would be available on the 1939 crop was accompanied by the statement that the loan rates would average about 61 cents per bushel for the country as a whole as compared with 59 cents for the 1938 crop. When subsequently announced, however, the basic loan rates on most classes of bread wheats at the principal terminal markets were found to be 5–6 cents per bushel above the 1938 rates; the bases at Gulf ports were 8 cents above 1938 rates; bases on durum wheats were 9–13 cents higher; and provisions were made for protein premiums which made possible further additions to loan values of as much as 5 cents per bushel in hard-winter-wheat territory and 9 cents per bushel in hard-spring-wheat territory. The loan rate on No. 2 Yellow Hard Winter wheat at Chicago, presumably likely to be most directly related to the price of Chicago futures, was set at 78 cents per bushel as compared with 73 cents in 1938. The loan rates, in conjunction with interest and storage charges to be paid by the borrower in the event of withdrawal of wheat from loan, apparently held the possibility of raising the price of the Chicago May future to about 85 cents per bushel. For the loan to have a maximum ultimate effect in supporting wheat prices, however, it was essential that prices should fall far below the loan rates. This circumstance created difficulties which are discussed in an Appendix Note, p. 31.

[4] The break in North American markets started at Chicago and its beginning was there viewed as largely a response to weakness in corn prices on July 19 and 20, but this depressing influence appears to have been merely a "last straw."

[5] The offers presumably were of wheat received by the Commodity Credit Corporation on unpaid loans, since the 1939 subsidy program was not announced until later. See pp. 20–21.

Argentina, Canada, and the United States for exports.

July 24–August 18.—From the low points reached on July 24 or 25 prices at Liverpool and Winnipeg advanced moderately through the remainder of the month. The advance began as a reaction from what appeared to have been perhaps an excessive decline. Liverpool prices had remained relatively firm while Chicago and Winnipeg prices were dropping 6 and 4 cents respectively during July 20–24, and at the low levels reached on the 24th purchases of Canadian wheat by importers were heavy and pressure of Argentine offers diminished. Prices of the deferred Liverpool futures advanced about 1 cent per bushel on July 25. On succeeding days reports of crop damage from continuing heat and drought in Canada supported the price advance. At Chicago the price recovery was stronger, aided by widespread confidence of price support from the wheat loans.

Comparative stability of prices at Liverpool and Winnipeg during the first week of August was followed by renewed weakness as weather in Canada turned more favorable to the maturing crop and Liverpool felt renewed pressure of Argentine wheat, in the form both of lowered prices on wheat afloat and of hedging in the futures market by shippers. Prices at Winnipeg approached their lows of the previous month, and at Liverpool new record lows were established.[1] At Chicago, a moderate reaction followed the sharp price recovery of late July, but prices soon turned upward again, influenced by buying in anticipation of effects of the government loans.

August 18–31.—Increasing threats of war in Europe began to be reflected in wheat prices on August 18. Looking back, one may see that the beginning of the final series of critical developments was indicated in news that appeared perhaps a week earlier, and it may seem that events thereafter marched uninterruptedly to the denouement of war. This seemed not the proper interpretation of the news as it appeared, however, and when the facts are better known it may yet appear that it was some small and unpredictable occurrence that swung the balance between peace and war: that there was indeed ground for hope until near the last that war might be averted.

During the last two weeks of August wheat prices in North American markets moved principally under the influence of changing opinions on the prospect of war. At Chicago, prices fluctuated less than at Winnipeg because the substantial support currently afforded United States prices by export subsidies and government loans might be expected to diminish sharply or to cease with a great price advance such as was widely anticipated in the event of war.

The fluctuating level of prices in North America may be taken as a rough index of traders' opinions on the probability of war; but it should not be assumed an accurate index of the opinions of any constant group of people because the identity of the holders of wheat futures may have changed substantially. Price advances may have been stimulated largely by buying of people to whom war seemed imminent, and subsequent declines largely by selling by people who had initially bought on other considerations and preferred to take their profits and stay out of the market while political news dominated price movements.[2]

Prices in North American markets failed to rise as high on August 28 and August 31 as they had on the 24th partly because of the course of Liverpool prices, which it seemed reasonable to interpret as a reflection of British opinion on the outlook for war. We now think it probable that the course of Liverpool prices from August 25 was dominated by expectation of prompt termination of futures trading in the event of war, together with some governmental action not made public.

[1] The Liverpool October future on August 18 fell to 3*s.* 6⅜*d.* per cental. On July 21 the lowest recorded price for any Liverpool future was established when the July fell to 3*s.* 4⅞*d.*, but the low for the October future on that day was 3*s.* 7¾*d.*

[2] An indication that such was the case may be found in the decrease of 4.5 million bushels in total open interest in Chicago wheat futures during August 19–31, at a time when continued increase might have been expected. A precipitous further decline of 18 million bushels from August 31 to September 8 was probably more influenced by other considerations—perhaps chiefly removal of mill hedges following heavy forward sales of flour.

On August 25 there was a quite abnormal change in relations between the October and the December futures, and it was on that day that sterling exchange was first allowed to drop sharply below the pegged level of about $4.68.

September 1–16.—With the attack of Germany on Poland on September 1, wheat prices in North American markets started an unprecedented advance that carried Winnipeg futures up about 24 cents per bushel and Chicago 21 cents in less than five trading days. The course of prices during the advance was much influenced and trading profoundly affected by the regulations limiting changes in futures prices in any one day to 5 cents per bushel from the previous close.[1]

From the highs reached in trading after the opening on September 7,[2] prices receded in the next five days about 8 cents per bushel at Chicago and 10 cents at Winnipeg, then recovered much of this loss. On September 16 Chicago prices closed about 20 cents higher than one month earlier (just before political news began to affect the market) and Winnipeg closed about 25 cents higher than a month earlier. Owing to a decline of the Canadian dollar to a discount of about 10 per cent, however, conversion of the Winnipeg quotations to United States currency results in showing the Winnipeg prices on September 16 only 17–18 cents higher than a month earlier.

At Liverpool wheat futures prices advanced only about 2 pence per cental during the first two days of war in Europe, restrained apparently by expectation of governmental control of wheat. Sterling exchange declined meanwhile from $4.33 to the pound to $4.20, with the result that at the close on September 2 Liverpool wheat futures prices in United States cents appeared little changed from two days earlier. Following the declaration of war by Great Britain on September 3 the government assumed full control of wheat, and trading in wheat futures was not resumed.

At Buenos Aires, wheat futures prices remained at about the fixed minimum of 7 pesos per 100 kilos until September 1. With the peso pegged to the pound sterling, however, the dollar equivalent of the Buenos Aires prices declined sharply when support of the pound was withdrawn on August 25. The curve of Buenos Aires futures prices in Chart 3 (p. 14) during late August thus reflects well the fluctuations in value of the pound sterling. On September 1 the October future at Buenos Aires rose to about 2 United States cents per bushel over the fixed minimum; and on September 5, when the October future advanced to more than 4 cents over the minimum, the September future also went above the minimum. This was followed on September 7 by announcement that the minimum prices had been suspended. Following this action the futures fell slightly below the former minimum, but soon recovered to about the 7-peso level, although the wheat board was reported as offering wheat for export at as low as 6.10 pesos per 100 kilos. The significance of suspension of the minimum price of 7 pesos thus appears somewhat obscure.

British wheat price relations.—Relations among c.i.f. prices of the various import wheats quoted on the British market (Chart 5) changed relatively little during May–August. Seller's quotations on most imported wheats were withdrawn on August 24 or 25. Following Great Britain's declaration of war on September 3, the British wheat trade passed under governmental control.

At the beginning of May all c.i.f. quotations were several cents higher relative to the Liverpool October future than three weeks earlier, having responded more to the bullish crop news of late April. Prices of Canadian and

[1] At Chicago the limit for the September future was 8 cents on September 1, but for the next day the upper limit was set, as for other futures, at 10 cents above the close on August 31. The limits on daily fluctuations were increased to 10 cents, effective at Chicago on September 7 and at Winnipeg on September 8, but these changes came too late to influence the course of prices.

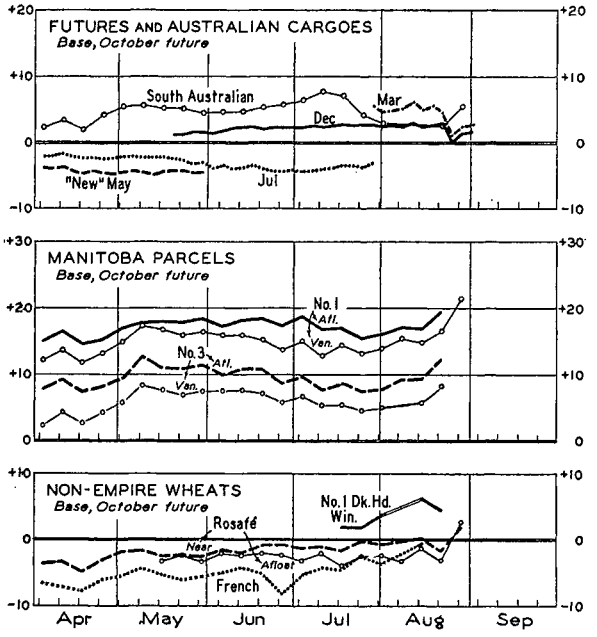
[2] At Winnipeg the highest prices of the day were recorded on some of the trades made at the opening. The opening trades in the October future were recorded at prices ranging from 82⅝ to 84 cents, but during the next few minutes the price fell to 75 cents and later recovered to 83 cents. At Chicago the opening range for the December future was 83–88 cents (probably an unprecedentedly wide opening range for a deferred future), but the price quickly fell to 82½ cents and later advanced to 89¼ cents. Use of the opening high at Winnipeg in a comparison of price declines at Chicago and Winnipeg during the next few days would tend to exaggerate the difference.

Australian wheats had risen more than others, and the advance in prices of Canadian wheats continued into the second week of May. Thereafter most of the Canadian quotations tended to decline gradually relative to the Liverpool October future.

From about mid-May the markets reflected effects of heavy purchases made during the previous price advance. Prices of Argentine wheat afloat fell to a discount under prices for new shipments, as former buyers undertook to resell. Rosafé parcels purchased later also fell into distress, with the result that until mid-July quotations on Rosafé wheat afloat tended irregularly toward increasing discounts under quotations for near shipment. The prospect of heavy arrivals in the British market led also to gradual widening of the price spreads between successive delivery months on the Liverpool futures market (Chart 5, top section). The course of prices of Australian wheat was noteworthy chiefly for their relative strength in early July, at the beginning of renewed price decline at Liverpool, and for their subsequent relative weakness, as pressure of Australian wheat was added to other price-depressing influences in the later stages of the decline.

CHART 5.—BRITISH WHEAT PRICE SPREADS, FROM APRIL 1939*

(U.S. cents per bushel)



* Price differences for futures (top section), based on Liverpool closing prices on Tuesdays and Fridays. For cash wheats, differences on Tuesdays between the opening price of the Liverpool October future and c.i.f. sellers' quotations, generally from Broomhall's *Corn Trade News*, on wheat for early shipment, except as otherwise designated; South Australian, cargoes to the United Kingdom; Manitobas, parcels to London; Rosafé, parcels to London or Liverpool, whichever were cheaper; French and United States wheats, parcels to Liverpool.

North American price relations.—Futures prices at Chicago and Winnipeg (Chart 3, p. 14) moved rather independently during most of May, as Chicago responded to prospects that the United States crop would only slightly exceed domestic requirements and might fall below them. They again moved rather independently for a time in mid-August, as confidence in price support from the wheat loans increased in the United States while Winnipeg anticipated the pressure of new-crop marketings. But during the remainder of May–August prices in these two markets corresponded to a degree that appears remarkable in view of the fact that the United States was not selling actively for export and that Chicago prices were under the influence of anticipated effects from domestic governmental programs that had little logical significance, or quite different significance, for Winnipeg.

Price relations within the Winnipeg market (Chart 6, p. 20, top section) experienced only minor changes, the most noteworthy being the relative decline in prices of No. 1 Garnet wheat at the end of July, indicative of an abnormal support of prices of Garnet wheats from the regulation permitting delivery of No. 1 Garnet on the Winnipeg future at a discount of only 8 cents per bushel.[1]

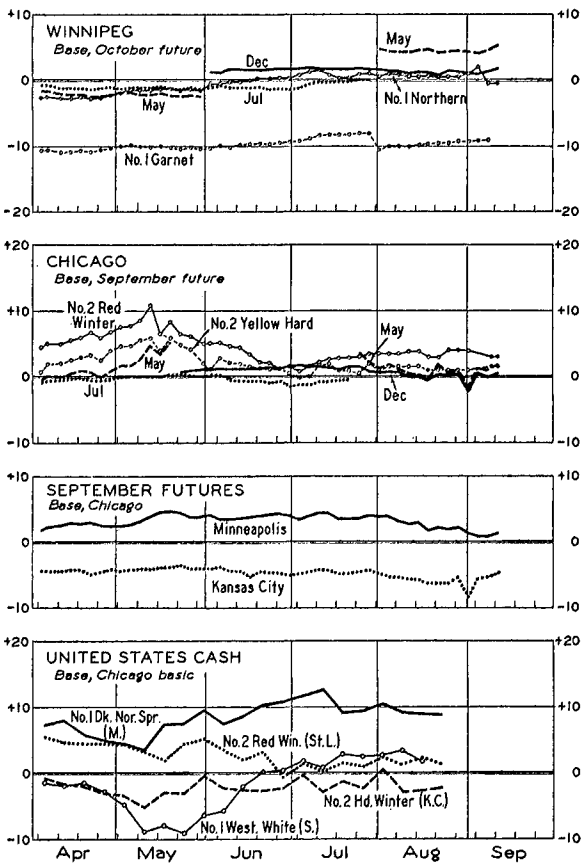
At Chicago the most striking changes in price relations were associated with a squeeze in Chicago May wheat. Operated in a unique

[1] When Garnet wheat was first given separate grading, No. 1 and No. 2 C.W. Garnet were made deliverable on Winnipeg futures at discounts of 5 and 8 cents per bushel, respectively, beginning with the October 1935 future. Three years later the discounts were widened to 8 and 11 cents, respectively, and on May 31, 1939 to 12 and 15 cents, effective for the November 1939 and later futures. This step was taken after considering with the Canadian Wheat Board the advisability of eliminating Garnet wheat from the deliverable grades.

manner, according to reports, through the placing of contracts outside the futures market calling for delivery of large quantities of wheat of contract grade near the end of May, the prospective squeeze was well concealed. Fears that the scarcity of cash wheat might be real rather than manipulated, or that a similar manipulation might be undertaken in

CHART 6.—NORTH AMERICAN WHEAT PRICE SPREADS, FROM APRIL 1939*

(U.S. cents per bushel)



* Price differences based on Tuesday and Friday closing quotations, except for United States cash wheats; these are weekly averages of daily quotations at Chicago (taken as the base) and Seattle, and weekly averages of all reported cash sales of the designated grades at Minneapolis, Kansas City, and St. Louis.

the July future, carried the July to a premium over the September for a time, but it subsequently went to a normal discount. From late July, expectations that storage of wheat under government loan would induce a scarcity of "free" wheat gave greater strength to the nearer than to deferred futures.

The Minneapolis September future held close to 4 cents over the Chicago September, and Kansas City 4–5 cents under Chicago, during most of May–July; but during August the two smaller markets were relatively weaker than Chicago. The change perhaps reflected evidence that under previous price relations Chicago would fail to receive an adequate proportion of new wheat receipts.

Weighted average cash prices in different United States markets (bottom section of Chart 6) changed substantially in their relations during May–June. Cash prices at other markets were low relative to prices at Chicago about mid-May as a result of the squeeze in Chicago wheat. Approximately normal relations were re-established by the end of May. During June deteriorating crop prospects in much of the spring-wheat area of the United States tended to strengthen prices of the better qualities of spring wheat, and the approach of new-crop marketing tended to weaken prices of soft red winter wheat, which had been relatively high since the previous December. The relative strength of prices at Seattle after late May was perhaps related chiefly to the fact that they had not previously advanced as much as prices east of the Rocky Mountains. Expectations that an especially large proportion of the crop in the Pacific Northwest would be placed under loan probably contributed to the relative strength in prices there.

United States export subsidies.—The 1938–39 programs for subsidized exportation of wheat and flour terminated on June 30, and for a time thereafter the only export sales made consisted of loan wheat taken over by the FSCC from the Commodity Credit Corporation and of small amounts which exporters had bought from the FSCC prior to June 30. On July 11 flour export indemnities were again made available at the rates that had been in effect during March 31–June 30, and announcement was made that indemnities would later become applicable on export sales to the United Kingdom and Eire—presumably on termination of the agreement by which British millers took 25 million bushels of

United States wheat. The extension of the indemnity program thus foreshadowed took effect on August 3. Changes in the flour export indemnities from March 31, 1939 were as follows, in dollars per barrel:[1]

Date	From Pacific Coast ports			From other ports
	China and Hong Kong	Philippines	General	
Mar. 31	1.25	1.00	1.20	1.25
June 5	....[a]	1.15	....[a]	....[a]
July 1	0.00	0.00	0.00	0.00
July 11	1.25	1.15	1.20	1.25
July 24	1.40	1.30	1.35[b]	1.40[b]
Aug. 17	1.55	1.45	1.50	1.55
Sept. 5	1.35	1.25	1.30	1.35
Sept. 8	1.25	1.15	1.20	1.25

[a] Unchanged.
[b] From Aug. 3, applicable also on sales to the United Kingdom and Eire.

Announcement that subsidies would be available on wheat exports, beginning August 19, was made on August 11, shortly after conferences in London looking toward an international wheat agreement ended without agreement.[2] The 1939 wheat subsidy program departs from the plan of having the FSCC buy wheat and resell to exporters as in 1938. Instead, the FSCC is to grant approved requests for subsidy payments submitted competitively on each separate export transaction.[3] According to trade reports, the subsidies approved during August ranged from 32 to 36 cents per bushel.[4]

Record Supplies for 1939–40

In the past crop year an unprecedentedly large quantity of wheat was available to the world ex-Russia from crops and carryovers combined. For the current year the total supplies now promise to be even larger. They appear likely to be of record size both in the world ex-Russia and in the world exclusive of India and Turkey as well. In both areas the indicated increase from 1938–39 is in the neighborhood of 150 million bushels, though this figure may be materially changed by revisions in standing crop statistics in the Northern Hemisphere and by the course of development of the major Southern Hemisphere crops. For the world exclusive of the USSR, Turkey, and India, the supplies of 1939–40 may now be estimated as follows, with comparisons, in million bushels:

Crop year	Initial stocks	Crops	Exports from USSR, India, Turkey	Total supplies	Disappearance
1928–29	662	3,687	...[a]	4,349	3,421
1929–30	928	3,186	9	4,123	3,235
1930–31	888	3,396	114	4,398	3,467
1931–32	931	3,421	69	4,421	3,471
1932–33	950	3,468	17	4,435	3,331
1933–34	1,104	3,359	38	4,501	3,328
1934–35	1,173	3,040	7	4,220	3,296
1935–36	924	3,101	30	4,055	3,309
1936–37	746	3,014	28	3,788	3,286
1937–38	502	3,290	65	3,857	3,289
1938–39	568	3,957	38	4,563	3,483
1939–40[b]	1,080	3,628	7	4,715	.....

[a] Net imports.
[b] Preliminary estimates and forecasts.

The record volume of wheat supplies in 1939–40 reflects the combination of a large inward carryover (p. 9) and a large new crop (pp. 11–12). Exports from the USSR, India, and Turkey will presumably be small, perhaps smaller than in any of the ten preceding years.

Of the major wheat-producing and wheat-consuming areas of the restricted "world" here considered, only French North Africa and the Danube basin appear to have record large

[1] Rates taking effect on the dates shown (generally at 2:00 P.M. Eastern Standard Time) and applicable until changed. No export indemnities were obtainable on sales to the United Kingdom and Eire between Dec. 2, 1938 and Aug. 3, 1939. For rates in effect prior to March 31, see Wheat Studies, May 1939, XV, 382.

[2] The failure of agreement was not regarded as final until war intervened. The United States Secretary of Agriculture said on Sept. 5, 1939, in an address at the International Cotton Meeting in Washington: "Before the outbreak in Europe there was, I believe, substantial ground for hoping that an effective wheat agreement would be reached very soon."

[3] The FSCC continued to sell loan wheat taken over from the CCC, and apparently is not excluded from buying for resale if occasion should arise.

[4] The flour export indemnity then in effect for exports from other than Pacific Coast ports and from the Pacific Coast to China and Hong Kong was $1.55 per barrel, equivalent, at 4.5 bushels per barrel, to 34.5 cents per bushel.

supplies this year.[1] Although later developments may place the Southern Hemisphere exporters also in this group, current forecasts for these countries are somewhat below the standing record for 1928–29.[2] In both North America and Europe ex-Danube, the supplies now indicated for 1939–40 are moderately large but substantially smaller than in several earlier years.

In view of present interest in the wheat supplies of the principal warring nations of Europe, it is illuminating to note that despite their large security stocks, neither Germany (including Bohemia-Moravia and Slovakia), nor the United Kingdom and France combined, appears to have appreciably more wheat available this year than in 1938–39.[3] Nevertheless, supplies in both warring camps are heavy, and larger than in all but three or four preceding years.

Current estimates of the wheat supplies of each of the four major exporting countries are shown in Table IX. The indicated supplies for 1939–40 do not establish a new record in any of these countries. But over the past fifteen years Argentine supplies appear to have been larger only in 1928–29, and Canadian supplies only in 1927–28, 1928–29, and 1932–33.

[1] Crops plus carryovers in the major regions are now estimated as follows, in million bushels:

Crop year	Total importing Europe	Germany, Austria, Czechoslovakia	United Kingdom, France	French North Africa[a]	Danube basin[b]	North America[c]	Southern Hemisphere exporters[d]
1928–29..	1,255	247	396	85	392	1,687	640
1929–30..	1,387	240	458	92	378	1,486	461
1930–31..	1,232	238	348	86	397	1,728	560
1931–32..	1,251	239	354	83	427	1,730	551
1932–33..	1,490	279	479	82	271	1,727	570
1933–34..	1,657	336	553	77	304	1,434	593
1934–35..	1,674	314	583	103	304	1,279	577
1935–36..	1,618	325	497	88	322	1,270	427
1936–37..	1,387	290	424	62	408	1,115	508
1937–38..	1,386	267	392	76	389	1,176	465
1938–39..	1,575	313[e]	498	78	490	1,460	605
1939–40..	1,572	317[e]	490	110	527	1,541	620

[a] Morocco, Algeria, Tunis.
[b] Hungary, Yugoslavia, Rumania, Bulgaria.
[c] Canada and United States.
[d] Argentina and Australia.
[e] Present boundaries for Germany (including Austria), Bohemia-Moravia, and Slovakia.

[2] Should the major Southern Hemisphere crops prove to be over 20 million bushels larger than now anticipated, the 1928–29 record would be surpassed. Only a month ago there seemed to be fair prospect of this development.

[3] See tabulation in footnote 1.

Outlook for Trade

When we attempted to appraise the outlook for international trade in wheat in mid-September 1938, only one major problem bearing on European imports had to be faced: Would the governments of the various European importing nations choose or not choose to build up security reserves if immediate war should be averted? This year, not one but several problems appear equally important and equally indeterminate: (1) Will the importing countries which built up substantial reserves in 1938–39 try to maintain or increase those reserves in 1939–40? (2) Even if the governments concerned should desire to keep large reserves on hand, will they be able to do so under conditions of warfare? (3) To what extent will naval blockades and submarine warfare interfere with maintenance of recent levels of wheat consumption in importing Europe?

The answers to these questions depend upon many circumstances and factors which cannot now be foreseen. Of primary importance is the scope and duration of the war. Should the conflict be confined to the countries now involved and end (as some expect) within a few weeks or months, the volume and distribution of European imports would probably be quite different than if the war continued throughout the crop year, and either did or did not widen in scope. Should some countries now neutral (e.g., Italy, Turkey, the four Danube countries) enter the war, the effect would depend on which countries they were and on which side they chose to enter. Should Germany resort to unrestricted submarine warfare against neutral as well as belligerent ships, or should England deem it necessary to put restrictions on wheat shipments to neutrals, European imports would presumably be substantially smaller than if such measures were not taken.

Since it is impossible to discuss the trade outlook for each country under each of the possible conditions suggested above, we adopt for purposes of discussion four fundamental assumptions: (1) The present war will not

shortly be terminated but will persist throughout the crop year. (2) The principal countries now neutral outside the British Empire will remain neutral during the next nine or ten months. (3) During the same period Germany will not resort to indiscriminate sinking of neutral vessels carrying supplies to neutral countries, nor will England interfere with necessary wheat shipments to neutrals. (4) Most European importing nations, whether belligerent or neutral, will try to hold large reserves of wheat within their boundaries to meet a possible future emergency induced by shortage of shipping space or by naval blockade. By January 1940, when we shall reconsider the outlook for trade in 1939–40, one or more of these assumptions may have to be changed; but while we place no great confidence in them, at present they seem more reasonable than their converse.

If the four assumptions stated above prove to be valid, how much wheat will be imported in 1939–40 by the principal belligerent nations, by European neutral nations, and by non-European nations? The following tabulation shows our estimates of August 1 stocks, current estimates of crops, and approximate requirements for seed, consumption, and stocks of the principal belligerent nations, in million bushels.

The ranges indicated in the prospective utilization figures for 1939–40 suggest uncertainties with respect to actual wheat consumption in these countries and do not allow for possible heavy destruction of domestic supplies or for possible large errors in standing crop estimates for 1939.

For the United Kingdom, there is reasonable certainty that the amount of wheat milled for food in 1939–40 will be much the same as in other recent years—say 220 to 225 million bushels. Even if every bushel of imported wheat should have to be convoyed to Britain, milling and bread standards will presumably be well maintained throughout the crop year, and bread will be kept fairly cheap as well as plentiful.[1] But it is quite uncertain how much wheat the government will permit to be imported or used for feed. If British shipping losses are heavy, or if the available shipping facilities are needed for other imports, use of wheat as feed for poultry and other farm animals may be held down sharply. On the other hand, the government may seek to maintain the existing numbers of livestock (though perhaps not of poultry) as a partial insurance against later scarcity of meat. Consequently, if adequate shipping facilities should be available and if wheat could be imported more

Aug.-July	Domestic supplies			Utilization			Net imports[b]
	Stocks	Crop	Total	Seed	Other[a]	Total[a]	
	A. United Kingdom						
1937–38...	36	56	92	4	250	254	195
1938–39...	33	73	106	4	263	267	230
1939–40...	69	60	129	4	{246 {256	{250 {260	...
	B. France						
1937–38...	48[c]	258	306	28	268	296	15
1938–39...	25[c]	373	398	29	270	299	(7)[b]
1939–40...	92[c]	275	367	29	266	295	...
	C. Poland						
1937–38...	7	71	78	11	61	72	0
1938–39...	6	80	86	11	62	73	(3)[b]
1939–40...	10	83	93	10	{55 {65	{65 {75	...
	D. Germany, Austria, Czechoslovakia						
1937–38...	37	230	267	19	249	268	47
1938–39[d]..	44	269	313	19	247	266	45
1939–40[d]..	92	225	317	19	{236 {246	{255 {265	...

[a] Covers use of wheat for food and feed, loss and waste, and errors in estimation of crops and stocks.
[b] Figures in parentheses represent net exports.
[c] For comparative purposes, French stocks are here placed 6 million bushels higher than in the tabulation in footnote 1, p. 22.
[d] August 1939 boundaries of Germany, Bohemia-Moravia, and Slovakia.

cheaply than corn or feed barley, the British government would probably permit utilization of substantial quantities of wheat for feed—perhaps as much as 35–45 million bushels. Nevertheless, we place our own guess as to the amount of wheat likely to be fed somewhat lower, as is suggested by the indicated

[1] At the outset, under the control machinery established on September 4, the basic price of straight-run flour was fixed at 22*s.* per sack of 280 pounds—a very moderate level. Even with the "quota payment" of 5*s.* 6*d.* per sack, the total was equivalent to only $3.91 per barrel wholesale at exchange rates then prevailing (£ = $4.06).

range of 250–260 million bushels for British domestic utilization in 1939–40. Should this range prove reasonably accurate and should the British government be able to increase wheat stocks to 80 million bushels on August 1, 1940, net imports into the United Kingdom would approximate 200 to 210 million bushels as compared with 195 million in 1937–38 and 230 million in 1938–39.

With regard to France, the principal uncertainty (aside from the 1939 crop estimate) seems to lie in the government's policy with respect to stocks. Any change in food consumption of wheat will probably be small and confined to a minor increase in the extraction rate for flour. And since feeding of wheat is never heavy in France except in years when the government provides for denaturing surplus wheat,[1] we may assume that total domestic utilization will remain in the neighborhood of 295 million bushels. The existing wheat supplies in France are adequate to cover this total consumption without imports, if stocks are reduced to around 70–75 million bushels. However, such a level of stocks, relatively large for peace times, would probably be regarded as inadequate under existing conditions of war. Moreover, the three countries of French North Africa have a large exportable surplus for France this year, and the French government will probably prefer to transfer much of this surplus to France for storage. In view of these considerations, it seems probable that French net imports of wheat will not be less than 15 million bushels and they may well reach 25 million—largely from northern Africa.

With record-large domestic supplies of wheat and rye this year, Poland would presumably have ranked as a net exporter of these grains in 1939–40 if war had not intervened. As it is, most of her large surplus is in regions now occupied by foreign troops; and some will presumably be absorbed by Germany without official recognition in either Polish or German trade statistics (if these are published for 1939). Neither in Poland nor Germany (including Bohemia-Moravia and Slovakia) can wheat utilization in 1939–40 be forecast with much confidence; for in this territory wheat is secondary to rye as a bread-grain and the consumption of wheat may be considerably reduced by governmental controls favoring substitution of rye and to some extent potatoes. However, since supplies of wheat as well as of rye are relatively large this year in Poland and Germany, since Germany, in spite of naval blockade, can probably obtain as much wheat as she needs from neighboring producing countries, and since German governmental controls have for three years favored the conservation of wheat, there is little reason at present to anticipate heavy reduction in Germany's wheat consumption during 1939–40. In Poland, wheat consumption may be determined by German and Russian decisions rather than Polish.

If the reductions should be no larger than indicated by the ranges of domestic utilization suggested in the tabulation on page 23, Germany would have to secure from Poland and other countries some 30 to 40 million bushels of wheat or draw down her own large stocks. Perhaps 10 million bushels might be taken from Poland without the inconvenience of exchange transactions. That would leave 20 to 30 million bushels for official importation from neighboring Danube states. Either Hungary or Rumania alone could supply this quantity and still ship a fair amount of wheat to other destinations. But the German trade counterpart of free English exchange is not all that might be desired—particularly under war conditions which may interfere with production for barter trade. Hence, if the French and British governments should consider it worth while to buy up the Danubian wheat surplus in order to prevent its shipment to Germany, there is little question that they would succeed unless fear prevented one or more of the Danube countries from following the course of greatest commercial advantage. The allied governments, however, might choose to center attention upon fuel oil rather than wheat. To starve out Germany might take years; but to cripple her motorized army by blocking imports of motor fuel might seem

[1] In 1938–39 almost 10 million bushels of wheat were said to have been denatured for feed. That this is not reflected in a higher domestic utilization figure for France for 1938–39 suggests that the 1938 crop may still be somewhat underestimated.

quicker and less expensive. Altogether, it seems reasonable to us now to expect Germany to take sizable wheat imports from the Danube countries in 1939–40—perhaps 20 to 30 million bushels.

Under the four assumptions stated earlier, one might anticipate that the major neutral nations of Europe will be able to secure the amount of imported wheat they need for current consumption in 1939–40. But it is perhaps already too late for them to add materially to their existing stocks, since British vessels are now operating under government orders and shipping space in neutral vessels is scarce and held at a high premium. At present we do not foresee for 1939–40 reemergence of a problem encountered in the last war—transshipment of grain to Germany by neutral importers. If, as seems likely, large supplies of grain will be readily available to Germany in Poland and the Danube basin, transshipment of overseas wheat by European neutrals will prove both unnecessary and unduly expensive.

The estimated supplies and requirements of the leading neutral importers of Europe are summarized in the tabulation opposite, in million bushels.

The suggested figures for 1939–40 involve many uncertainties. Except for Italy, the 1939 crop estimates are mainly unofficial and may contain substantial errors. But most uncertain are the proposed utilization figures, which are based upon our assumptions (1) that shipping space will be available for reasonably adequate but not large shipments of wheat to the neutral nations and (2) that neither Britain nor Germany will operate so as markedly to curtail such shipments. If these prove valid, and if current crop estimates are not seriously in error, the northern European neutrals and Switzerland will probably import 85 to 95 million bushels of wheat in 1939–40 as compared with 100 million last year; and Italy and Greece will perhaps take 22 to 27 million bushels in 1939–40, as compared with 26 million in 1938–39. As a result of the large exportable supplies in the Danube basin, recent levels of wheat consumption may be easier to maintain in Italy, Greece, and probably Switzerland than in Holland, Belgium, and Scandinavia. In fact, Italy may even add moderately to her year-end stocks, if she continues a neutral.

The Iberian and Baltic states are not considered in the tabulation below. In Portugal, and also in Estonia, Latvia, and Lithuania, this year's bread-grain crops are reported to be adequate for domestic needs. Finland, which has recently imported only 2 to 3 million bushels annually, will probably take even less this year in the face of existing shipping difficulties and a reported large domestic crop. Spain alone remains a potentially sizable importer. Officially estimated at 112 million bushels, the 1939 Spanish crop appears seriously deficient as judged by official crop estimates issued prior to 1937, but there is no certainty that the 1939 estimate is truly comparable with the earlier official figures. Nor is it reasonable to compare the 1939 estimate with widely circulated private crop approximations for 1937 and 1938. Indeed, such comparisons result only in confusion: for 1938

Aug.-July	Domestic supplies			Utilization			Net imports[b]
	Stocks	Crop	Total	Seed	Other[a]	Total[a]	
	A. Netherlands, Belgium, Switzerland						
1937–38...	16	36	52	2	112	114	76
1938–39...	14	45	59	3	116	119	85
1939–40...	25	35	60	3	{109 {113	{112 {116	..
	B. Scandinavia						
1937–38...	8	42	50	4	50	54	13
1938–39...	9	49	58	4	55	59	15
1939–40...	14	42	56	4	{46 {51	{50 {55	..
	C. Italy						
1937–38...	27	296	323	24	273	297	4
1938–39...	30	297	327	24	276	300	13
1939–40...	40	294	334	25	{270 {275	{295 {300	..
	D. Greece						
1937–38...	3	30	33	5	42	47	18
1938–39...	4	36	40	6	42	48	13
1939–40...	5	32	37	6	{40 {42	{46 {48	..

[a] Covers use of wheat for food and feed, loss and waste, and errors in estimation of crops and stocks.

[b] Without deduction of the crop-year net exports of any country.

alone one would have to choose between private estimates as markedly different as 71 and 96 million bushels. The Spanish wheat supply position for 1939–40 is thus decidedly obscure, despite the availability of an official crop figure which may be reasonably accurate. Recognizing that our import estimate for this country can be no more than a sophisticated guess, we place the guess at 12 to 17 million bushels.

In total, therefore, European net imports of wheat in 1939–40 may be as small as 370 million bushels or as large as 420 million under the four assumptions we accepted as the basis of our forecast. Should belligerent and neutral countries find it feasible to add very heavily to their present reserves of wheat, European imports would be larger than we have figured; should most countries find it necessary to curtail consumption heavily or to reduce their existing reserves to more normal levels, the total imports would probably fall below the indicated range.

Non-European imports cannot be forecast with any more confidence than can the imports of European countries. Increased freight and insurance costs and shortage of shipping space will presumably result in smaller shipments to ex-Europe than would have taken place in the absence of war in Europe. But to what extent these and other influences will reduce non-European imports from their level in 1938–39 is far from clear.

China's wheat crop is apparently slightly larger this year than last. More important, Chinese exchange is worth considerably less in terms of foreign money. These factors, together with the higher shipping costs, would tend to reduce Chinese imports from their level of 28 million bushels in 1938–39. On the other hand, the disturbed internal conditions in China which interfered with the flow of domestic wheat to coastal cities in 1938–39 appear unchanged; Japan and Australia both seem likely to have large supplies of wheat for export in 1939–40; and at present the American subsidy on flour shipments to China is higher than it was during most of 1938–39. Under these conditions we are inclined to believe that the reduction in Chinese imports from 1938–39 may reach but perhaps not significantly exceed 10 to 15 million bushels.

With larger harvests in 1939 in Manchukuo and Palestine, the imports of these countries also will probably be reduced this year—perhaps by something over 5 million bushels. And current shipping problems and higher costs may account for a further decrease of about the same magnitude in the net imports of other non-European countries. In total, then, non-European imports may be roughly 25 million bushels smaller in 1939–40 than they were in 1938–39.

Sources of exports.—Should European net imports total 370 to 420 million bushels this year and non-European imports be around 125 million, world net exports might total only 525 to 575 million bushels, as compared with reported exports of 643 million in 1938–39. To supply these moderate exports there are heavy surpluses of wheat in every important exporting region except Russia and perhaps India.

The prospective distribution of exports between the exporters seems scarcely subject to numerical presentation. It can probably be assumed that Russia and India will export little or nothing. It is probably safe to say that the Danube countries—assuming their neutrality—will be in a favored position to export, because of their geographical location and because both the allies and Germany will presumably be anxious to secure their good will; and that France, facing a deficit crop and need for large reserves, will afford a large protected market for her North African dependencies. Exports of almost 100 million bushels may come from countries near the Mediterranean and Black Seas. The prospective volume of exports from overseas countries might thus be expected to range between 425 and 475 million bushels, of which all but 10–15 million would be shipped by Canada, the United States, Argentina, and Australia. Should the Danube countries and/or Italy become involved in the current war, exports from the Mediterranean area would probably be smaller and overseas exports perhaps larger.

The distribution among the four overseas nations will depend heavily upon the allocation of British shipping to its various tasks and British policy in allocating purchases to Em-

pire and non-Empire sources; upon the relative disadvantages that may be suffered by the longer routes from Australia and Argentina and the Pacific Coast; upon British policy with respect to the early shipment of Argentine supplies while British shipping facilities are still adequate, leaving large stocks in the more accessible positions in Canada; upon the outcome of the Southern Hemisphere crops to be harvested in December; upon decisions with regard to the export subsidy in the United States. On these important matters the bases for prediction seem very slender, and we therefore reserve consideration of the prospective distribution of crop-year exports by sources until our next Survey is published in January.

Prospects for 1940 Carryovers

There is now little question that stocks of old-crop wheat on August 1, 1940 will be of record size—perhaps some 50 to 100 million bushels larger than the present record carryover of 1934. Only failure of one of the major Southern Hemisphere crops, extraordinarily heavy destruction of wheat on passage to Europe[1] or in belligerent countries, or substantially heavier consumption of wheat than seems reasonably to be anticipated under war conditions would be likely to prevent "world" wheat stocks from rising to a new high level in 1940.

To speculate on the exact distribution of the prospective record carryover of next August appears futile in view of the numerous uncertainties now existing with respect to 1939 crops and the outlook for trade. One may feel reasonably sure, however, that the four overseas exporting countries will hold aggregate carryovers of record or near-record size, and that despite large exports, the Danube nations will probably carry unprecedentedly large reserves in anticipation of future scarcity or of higher wheat prices. Of the four major exporters, the United States will hold smaller old-crop stocks in 1940 than in one or more earlier years; but Canada, Argentina, and Australia may face the problem of providing storage facilities for record quantities. If standing crop and stocks estimates for the United States are reasonably accurate, if domestic utilization should approximate 700 million bushels, and if neither natural shipping advantages nor governmental subsidies should result in the exportation of more than about 40 million bushels of American wheat during July–June 1939–40, the United States would hold about as much old-crop wheat at the end as at the beginning of 1939–40. If American exports are appreciably larger or smaller, there will probably be about a corresponding reduction or increase in the domestic carryover.

In importing Europe, wheat stocks will probably be only moderately larger than in 1939, not because many governments will not be wanting larger reserves, but because shipping difficulties, domestic storage problems, and inadequacy of foreign credits will probably combine to keep European wheat imports smaller than might seem desirable to governments anxious to increase war stocks.

Outlook for Prices

Under such uncertainties as attend the onset of a great war, discussion of the outlook for wheat prices must run more in terms of contingencies than of probabilities. Nevertheless we venture the opinion that wheat prices in North America are more likely before the end of December to have a sustained decline below the levels of mid-September than to remain generally above them. Their course during the period may be substantially influenced by political and military developments not now predictable, and by the course of prices of other commodities.

General considerations.—Appraisal of the outlook for wheat prices during even the next few weeks or months may properly include consideration of the possibilities over a period extending several years ahead. How long will the war last? What countries will be brought into it? Will scarcity of ocean shipping become acute? Will more or less severe shortage of wheat develop, as in the last great war? Will great advances eventuate in commodity

[1] In March 1917 when the submarine campaign was most destructive, some 12 per cent of the grain shipments destined for the United Kingdom were destroyed. Should the percentage unexpectedly be as large during 1939–40, world stocks of wheat might be significantly smaller than anticipated.

prices generally? Yet it must be recognized that sound judgments on the probabilities with respect to such fundamental questions might prove more misleading than helpful in appraising the probable course of wheat prices during the next few months. If governments should act promptly on the assumption that a serious shortage of wheat would develop, the immediate effect on prices might be the same as though such a shortage were in fact imminent. Whether the responsible governmental agencies actually considered a shortage likely, or merely considered it prudent to risk error in that direction rather than the opposite, would make little difference in the immediate effect. Similarly, if private buyers and sellers of commodities should act on the assumption that broad general price advances are in prospect, the immediate effects are likely to be similar whether the assumption is sound or not. In short, the fundamental factors that might logically be considered in determining reasonable prices of wheat under existing circumstances and prospects, will actually affect prices only as they affect the thinking and actions of influential individuals and governments. The course of wheat prices during the next few months will be determined largely by governmental actions and public expectations which will not necessarily be closely related to reasonable grounds for judgment.

Although governmental actions may lean to the side of guarding against an improbable contingency of local or general wheat shortage, the fact of probable abundance of wheat supplies in reasonably accessible positions must weigh strongly. The critical problem of supply concerns quantities reasonably accessible to importing Europe under conditions of more or less severe shortage of shipping. The most accessible supplies are those in North America and in countries bordering the Mediterranean and Black seas.[1] Assuming imports by European countries about sufficient to maintain existing levels of security reserves or to increase them moderately, Europe ex-Danube may take 370–420 million bushels of wheat during the current season (p. 26). On certain other assumptions outlined above, it seems reasonable to suppose that about 100 million bushels may be supplied by countries bordering the Mediterranean and Black seas (pp. 22–23, 26). The remainder could be supplied from the exportable surplus now available in Canada alone, leaving there a large carryover of about 110–160 million bushels.

It is futile to attempt to foresee in detail the changing balance between export surpluses and import requirements beyond the current crop year. Yet it must be said that a position of marked shortage is difficult to imagine even in 1940–41, and calculable prospects seem to point rather toward continued abundance of wheat available for export. The exportable supplies of North America alone, given normal yields in 1940 on an acreage equal to that of the present year, apparently would permit exports of about 850 million bushels during the two crop years 1939–40 and 1940–41—more than double the quantity that Europe seems likely to import during 1939–40. The current war cannot possibly witness the drying up of as important a source of wheat exports as occurred in 1914–18, when Russian and Rumanian exports disappeared; and there is now opportunity to obtain a great and prompt increase in productive capacity in the United States merely through removing current restrictions on acreage, if that should seem wise.

Argentine and Canadian influences.—A realistic view of the short-term outlook for wheat prices must give first consideration to the fact that Argentina has a record carryover of old-crop wheat and a favorable prospect for the crop now growing. The Argentine Grain Regulating Board might take the view that export sales should be made sparingly in the hope of recouping losses on its wheat holdings through a war-stimulated advance in prices. Alternatively it might take the view that continuation of war in Europe carries such a grave risk of curtailing Argentine exports that prudence requires pressing export sales more actively than during May–August. Strongly favoring a decision to strive for large export sales is the urgent need for relieving pressure

[1] The accessibility to individual countries of supplies from these regions would depend on the alignments among belligerent countries and on the fortunes of war, but exportation from these regions could continue with only moderate restraint under several conceivable sets of circumstances.

on inadequate storage facilities before the new crop must be handled.

Last May, with crop news that gave ground for hoping for substantially higher prices, the Argentine board chose nevertheless to take advantage of a flood of buying offers by selling freely at only slightly advanced prices: about 5.50 pesos per 100 kilos, then equivalent to about 46¾ cents per bushel. Recently (Sept. 16) the board has been reported as selling at 6.12½ pesos per 100 kilos, equivalent at current exchange rates to about 46⅝ cents per bushel. This represents a substantial advance from the low of August at 4.50 pesos, equivalent at exchange rates then current to 37¾ cents per bushel, but seems to indicate continuation thus far of a policy of free selling. On this evidence, we venture to assume that Argentine selling policy during October–January will be such as to tend to restrain price advances in North American markets or to encourage price declines. We see no good ground for supposing that in the event of a downward trend in prices in North American markets under pressure for export sales, Argentina could be counted on to resist the decline except possibly in the event that prices should approach about 5 pesos per 100 kilos.

The outlook for prices at Winnipeg can be discussed only on the assumption that an open market is maintained. We assume also that trading in futures on the Winnipeg exchange will be continued. Validity of these assumptions appear reasonably assured, at least for the near future, by a public statement of the Canadian Minister of Trade and Commerce, under whom the wheat board functions.[1] It may be supposed that restrictions on trading would be likely only in case prices should rise to levels which the government considered objectionable. If, on the contrary, prices should fall too low, in the eyes of the government, measures less drastic and more economical than termination of trading on the open market would suffice to assure wheat growers of such returns as the government wished or to prevent too rapid a movement of Canadian wheat into export.

Speculative buying in the futures market may suffice to maintain the Winnipeg December future generally above 75 Canadian cents per bushel (67.5 United States cents at recent exchange rates) for some weeks after mid-September. If Argentine selling pressure should continue heavy, however, as we anticipate, Canadian prices might later decline below that level, and perhaps below the wheat board buying price of 70 cents per bushel. It seems not unreasonable to suppose, however, that at prices as low as about 70 Canadian cents per bushel, a governmental policy of accumulation of reserves might be put into effect. Below such a price, the wheat board might resell little or none of the wheat delivered to it; and if prices should decline thus after the bulk of farmers' marketings had been sold, the board or some other agency might be empowered to buy wheat to be held as a reserve, perhaps specifically for the account of the British government.

The United States.—The United States may exercise relatively little influence in determining international wheat prices during October–December. We think it reasonable to assume that such export subsidies as may continue to be offered will be at levels permitting only moderate export sales of wheat and flour during October–January.[2] If we rightly interpret the theory of the "ever-normal granary," a prospective carryover of 250 million bushels or more in the United States on July 1, 1940 might be viewed as desirable under war conditions. To permit such a carryover, exports during 1939–40 apparently would have to be held to about 40 million bushels or less. The disposition to encourage exports for the sake of holding for the United States, in the face of severe competition, what was deemed a fair share of world exports will probably exert less influence in determining policies under war conditions than it appears to have exerted hitherto.

In the absence of other reasons for encouraging wheat exportation through subsidies, it

[1] A Canadian Press dispatch carried by the *Winnipeg Free Press* on September 8 said: "The government has decided that for the present the wheat futures market on the Winnipeg grain exchange will continue to operate, Hon. W. D. Euler .... announced today."

[2] The problem of disposing of the wheat surplus in the Pacific Northwest seems likely to induce continuation of substantial exports under subsidy from that region.

is conceivable that maintenance of a substantial volume of exports might be sought merely as a means of supporting domestic wheat prices. We judge such considerations to have played only a secondary part in determining the subsidy program in the past, and assume that they will not weigh more heavily during October–January. The Administration policy with respect to wheat appears to have been to employ the wheat loans and soil-conservation and price-adjustment payments as the chief means of contributing to incomes of wheat growers, favoring them as selective measures that reward compliance with the Administration's agricultural program.

Whether the wheat loans will prove a significant price-supporting influence in the event market prices should fall again below loan levels during October–January will depend on developments in the meantime. While prices remain above loan levels, little wheat will be placed under loan, and growers may sell freely both from new marketings and from stocks already under government loan. If prices should remain above loan levels for a month or two, and if exports should be small, supplies of "free" wheat might prove so abundant that the loan program would lose most or all of its potential influence on prices.

Without strong support from governmental measures, wheat prices in the United States cannot indefinitely remain some 30 cents per bushel above a normal export basis, as they were in mid-September; but optimistic speculative holding might maintain prices at such levels for several weeks or months. If Canadian prices should decline, however, and if exports from the United States should be small, as suggested above, it would not be surprising if the Chicago December future should decline below 75 cents per bushel before the end of December.

The general price level.—The foregoing discussion leaves out of account the possibility of a strong tendency toward continued advance in commodity prices generally, such as might be reflected in wheat prices also. An analysis of the outlook for the general price level is beyond the scope of the present discussion, but some aspects of the problem deserve notice. Our studies of relations between changes in wheat prices and changes in the wholesale price level have tended to support the view that the substantial degree of relation which exists is not wholly a consequence of response of wheat prices to certain general influences best reflected in a general price index number, but that commonly circumstances that would induce changes in wheat prices in the absence of general price changes exert a substantial influence in determining the general price movement. This is not to say that a broad general price movement may not develop when circumstances especially affecting wheat tend in a contrary direction; but it does appear that the chances of development of a broad general price advance or decline are appreciably enhanced when special circumstances affecting wheat tend in the same direction. To that extent, our view that the wheat situation is not favorable to a strong further advance in wheat prices carries with it a view that the likelihood of a broad general price advance is less than it would be otherwise. To the extent that conditions of surplus not likely to be greatly affected by war exist in other commodities, those conditions also seem to weigh against the probability of a continued strong advance in commodity prices generally in the near future.

Runaway inflation, of course, reduces all such considerations to negligible importance; but runaway inflation seems not in prospect for the United States or any other major overseas wheat exporting country in the near future. Whether a war-stimulated business boom, if it comes, would suffice to start a rapid general price advance during the next few months, despite the dampening influence of certain raw-material surpluses, remains to be seen. If such an advance should come, wheat prices would doubtless respond, but wheat prices seem not likely to lead in any such movement.

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APPENDIX NOTE

PRICES AND THE GOVERNMENT LOAN PROGRAM

The extent to which market prices in the United States fell below the rates at which federal loans could be obtained under the 1939 loan program surprised many observers of the wheat market. At the bottom of the price decline in late July prices were 15 cents per bushel or more below loan rates. The wide disparity between market prices and loan rates appears largely attributable, on the one hand, to willingness of many growers to take a substantial discount to avoid the inconveniences of obtaining loans, and, on the other hand, to uncertainty of potential buyers regarding prospective governmental actions.

Potential purchasers of wheat had to reckon with several major uncertainties in estimating the probable price influence of the loan rates. The loan program held the possibility of leading eventually to a price of over 85 cents per bushel for the Chicago May future. For the loan program to have its maximum possible effect in supporting the price of the Chicago May future, it would be necessary, first, that a sufficient amount of wheat should be placed under loan; second, that the terms on which growers might redeem loan wheat should not be significantly altered; and third, that wheat acquired by the CCC on maturity of loans should not be made commercially available at prices below loan values plus carrying charges. If any of these conditions should be wanting, the loan rates might have relatively little effect in supporting prices.

To assure that loans would be placed on enough wheat to render the loan rates effective in supporting prices later, it was necessary that the market price should remain substantially below loan values through a considerable period after harvest. The rate at which growers appeared to be selling in preference to storing under loan when market prices were about ten cents under loan values led to doubt whether such differentials would result in giving the loan rates a substantial influence on prices later. Paucity of information on applications for loans left the outlook highly uncertain.[1]

The provision that loans on wheat stored in public elevators should mature seven months after date meant that by February the Commodity Credit Corporation might be receiving large quantities of wheat released by growers. If this wheat should then be offered freely at prices below its cost to the government agency, these offers would determine the market price. It was by no means clear that the governmental program would be directed toward maintaining market prices near a parity with the loan rates. From the standpoint both of economy in export subsidies and of giving co-operating farmers (who alone were eligible for loans) an advantage over those not complying with the agricultural program, the administration might prefer to have market prices remain below the loan basis.

Buyers of wheat were given assurance regarding the disposition of wheat on maturity of loans by an official statement in mid-August that wheat relinquished to the CCC would not be sold at prices below loan values plus accumulated costs of carrying.[2] There remained uncertainty, however, on the third element in the situation. Farmers borrowing on wheat under the 1938 loan program had been allowed, after April 1, 1939, to redeem wheat under loan by payment merely of the market price of the cheapest country-run wheat of the same grade and sub-class as that which they had under loan.[3] Growers whose wheat was of superior quality thus had an incentive to sell it at the market price rather than to allow it to revert to the CCC, since they would thereby obtain more than the loan value plus carrying charges. If such a provision should be applied in connection with the 1939 loans, much of the wheat stored under loan might be returned to commercial channels before any significant scarcity of free wheat developed. It could be argued that the inclusion of premiums for protein in the schedule of loan rates under the 1939 program will leave less reason than existed last year for giving borrowers the opportunity of realizing more than the loan values plus carrying charges; but grounds would still exist on which borrowing growers might argue cogently for renewal of the option granted last year. By offering such an option again, the CCC could gain the advantage of a considerable reduction in the amount of wheat to be taken over and merchandised by government agencies. The fact that offering such an option would tend to depress market prices might not appear to the government agencies as a disadvantage.

Trade comments that reflected prevalent reasoning in speculative circles may be interpreted

[1] No official announcement of the quantities for which loan applications had been made was issued until late August; hence the trade had to rely entirely on private estimates of prospective storing, which varied greatly.

[2] The statement was made in an address by R. M. Evans, Agricultural Adjustment Administrator, at Amarillo, Texas, Aug. 11, 1939.

[3] Mimeographed announcement of the CCC, Mar. 14, 1939.

to indicate that many speculators bought wheat with greater confidence in the price-supporting efficacy of the loan program than the known facts warranted. Others doubtless took full account of the uncertainties in the situation. Whether the net effect of speculative opinion was to keep prices during the summer higher or lower than the probabilities warranted, it is impossible to judge, nor will the outcome afford an answer to this question.

The most likely ultimate price consequences of a loan program are that it should either be almost fully effective or that it should have relatively little effect in supporting prices. If a loan program reduces supplies of free wheat below the amount needed for domestic utilization, exports, and minimum working stocks, supplies must be withdrawn from loan storage and the loan basis tends to determine the market price. If enough free wheat is left to provide for domestic utilization, exports, and working stocks sufficient for convenience, the loan program tends (as in 1938–39) to have little effect on prices. The margin between the amount of loan storage that would have one of these effects and the amount that would have the other is a narrow one.

But if prices for a considerable period after harvest should be very low, on the assumption that the loan program would have little price effect, much wheat would be stored under loan and the price effect would in fact tend to be great. If prices for a considerable period after harvest should be at a level appropriate to the assumption that the loan program would give strong price support, little wheat would be stored under the loan and the result would tend to be almost complete ineffectiveness of the program. It is therefore almost impossible under existing conditions that the market price during the few months after harvest should have a normal relation to the price later in the season.

This anomalous situation is perhaps not a necessary accompaniment of a federal wheat loan program. It arises partly from uncertainty regarding the future disposition of wheat placed under loan, and more particularly from the apparent reluctance of growers to make use of the loan provisions. It might not exist if there were assurance that wheat placed under loan would not, during the current crop year, be sold at prices below its value in relation to basic loan rates, and if growers generally took prompt advantage of the loans whenever market prices were even slightly below the loan basis.

APPENDIX TABLES

TABLE I.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING AREAS, 1934–39*

(Million bushels)

Year	World ex-Russia[a]			United States	Other chief ex-porters[b]	Europe ex-Russia				French North Africa[d]	India	Others ex-Russia[a]	USSR
	Total[a]	North-ern Hemi-sphere	South-ern Hemi-sphere			Total	Lower Danube[c]	France, Italy, Ger-many	Others				
1934.....	3,490	3,046	444	526	650	1,546	249	738	559	97	350	321	1,117
1935.....	3,557	3,184	373	626	568	1,575	302	739	534	70	363	355	1,133
1936.....	3,508	3,038	470	627	620	1,480	384	642	454	50	352	379	1,135[e]
1937.....	*3,787*	*3,344*	*443*	876	552	*1,536*	361	718	*457*	72	364	*387*	1,625[e]
1938[f].....	*4,479*	*3,931*	*548*	931	821	*1,838*	464	*860*	*514*	73	402	*414*	.....
1938[g].....	*4,515*	*3,943*	*572*	931	841	*1,856*	466	875	*515*	72	402	*413*	.....
1939[g].....	*4,151*	*3,681*	*470*	736	*844*	*1,666*	*457*	*733*	*476*	102	371	*432*	.....

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

[a] Excludes China, Iran, and Iraq.
[b] Canada, Australia, Argentina.
[c] Hungary, Yugoslavia, Rumania, Bulgaria.
[d] Morocco, Algeria, Tunis.
[e] Probably not comparable with earlier years.
[f] As of about May 20, 1939.
[g] As of about Sept. 20, 1939.

TABLE II.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING COUNTRIES, 1934–39*

(Million bushels)

Year	U.S. winter	U.S. spring	Canada	Australia	Argentina	Uruguay	Chile	Brazil, Peru	Hungary	Yugoslavia	Rumania	Bulgaria	Morocco	Algeria	Tunis
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	31.8	7.41	84.2	73.1	96.4	47.9	20.0	33.5	16.9
1936...	519.9	106.9	219.2	151.4	249.2	9.2	28.6	8.54	87.8	107.4	128.7	60.4	12.2	29.8	8.1
1937...	685.8	189.9	180.2	187.3	184.8	16.6	30.3	....	72.2	86.2	138.2	64.9	20.9	33.2	17.6
1938[a]..	686.6	244.2	350.0	151.0	319.7	14.7	....	....	96.8	111.3	177.2	79.0	23.9	34.9	14.0
1938[b]..	686.6	244.2	350.0	154.4	336.2	15.3	35.2	....	98.8	111.3	177.2	79.0	23.2	34.9	14.0
1939[b]..	550.7	185.4	449.1	*160.0*	*235.0*	....	....	....	112.1[c]	103.7	176.4	*65.0*	38.8	44.8	18.6

Year	United Kingdom	Eire	France	Italy	Germany	Austria	Czecho-Slovakia	Switzerland	Belgium[d]	Netherlands	Denmark	Norway	Sweden	Spain	Portugal
1934...	69.8	3.80	338.5	233.1	166.5	13.3	50.0	5.55	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	15.5	62.1	5.97	17.1	16.7	14.7	1.87	23.6	158.0	22.1
1936...	55.3	7.84	254.6	224.6	162.7	14.0	55.6	4.47	17.2	15.4	11.3	2.09	21.6	121.5	8.7
1937...	56.4	6.99	257.8	296.3	164.1	14.5	51.3	6.18	16.8	12.6	13.5	2.50	25.7	*110.2*	14.7
1938[a]..	73.3	7.40	*358.2*	297.3	205.0	16.2	65.7	7.79	21.9	15.1	16.9	2.64	30.2	*96.0*	16.5
1938[b]..	73.3	7.40	372.9	297.3	205.0	16.2	65.7	7.80	21.9	15.1	16.9	2.64	30.2	96.0	16.5
1939[b]..	59.7	*7.20*	*275.0*	294.0	*187.0*[e]		*38.0*[f]	6.58	*15.9*	*13.0*	*14.0*	*2.40*	*26.0*	111.8	*18.0*

Year	Poland	Lithuania	Latvia	Estonia	Finland	Greece	Turkey	Other Near East[g]	Egypt	Japan	Chosen	Manchukuo	Mexico	South Africa	New Zealand
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	16.4	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	37.3	10.7	23.7	8.86
1936...	78.4	8.0	5.27	2.43	5.26	19.5	141.6	20.3	45.7	45.2	8.1	35.2	13.6	16.1	7.17
1937...	70.8	8.1	6.30	2.79	7.66	30.0	133.0	24.1	45.4	50.4	10.2	41.4	10.6	10.2	6.04
1938[a]..	79.8	9.2	7.05	3.14	7.97	36.1	160.4	27.0	45.9	45.2	10.4	34.3	13.4	17.1	5.92
1938[b]..	79.8	9.2	7.05	3.14	9.40	36.1	156.1	27.3	45.9	45.2	10.4	34.3	13.4	17.1	5.92
1939[b]..	83.4	*8.0*	*6.50*	*2.50*	8.23	*32.0*	*152.0*	*29.0*	49.0	54.4	12.3	47.0	*13.0*	*15.0*	....

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

[a] As of about May 20, 1939.
[b] As of about Sept. 20, 1939.
[c] New boundaries.
[d] Including Luxemburg.
[e] Including Sudeten.
[f] Bohemia-Moravia and Slovakia.
[g] Syria and Lebanon, Palestine, Cyprus.

TABLE III.—WHEAT RECEIPTS IN NORTH AMERICA, MARCH–AUGUST 1939, 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.
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	42.9
1937	7.6	8.9	7.6	19.4	218.1	111.9	62.2	5.8	4.2	4.1	3.6	3.1	161.7	20.5
1938	10.6	10.9	14.3	17.0	330.9	101.2	61.1	4.0	4.6	2.8	3.9	3.1	125.6	39.6
1939	13.7	16.0	25.5	44.0	382.8	99.0	43.9	5.5	5.1	5.0	5.2	8.0	290.5	54.0

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

[a] From 1933–34 to 1938–39.

TABLE IV.—WHEAT VISIBLE SUPPLIES, MAY–SEPTEMBER 1939, 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						
1939											
May 1	335.7	74.9	.0	130.3[a]	.8	206.0	32.5	24.2	56.7	46.5	26.5[b]
June 1	294.3	64.2	.9	108.5[a]	2.9	176.5	41.9	20.4	62.3	31.5	24.0[b]
July 1	296.2	81.3	.6	95.3[a]	5.9	183.1	45.4	21.2	66.6	22.5	24.0[b]
Aug. 1	343.2	149.3	.5	84.9[a]	6.6	241.3	34.9	25.5	60.4	18.0	23.5[b]
Sept. 1	403.0	166.3	.6	131.5[a]	7.2	305.6	29.9	29.0	58.9	13.5	25.0[b]
Sept. 1											
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	250.8	81.0	.0	104.1[a]	18.3	203.4	23.7	8.0	31.7	8.0	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
1938	264.4	133.7	.1	49.7[a]	.6	184.1	39.6	16.6	56.2	13.8	10.3

* 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] Excluding, for comparability, stocks in transit by rail which are now included in officially published totals.

[b] Approximate; see WHEAT STUDIES, May 1939, p. 368.

TABLE V.—UNITED STATES AND CANADIAN CARRYOVERS OF WHEAT, FROM 1934*

(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.
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	31.7	22.0	49.5	147.5	.0	7.9	53.8	126.6	12.9	.9	202.1	11.7
1936	44.0	22.3	25.2	50.6	142.1	.0	5.5	36.2	59.7	5.0	1.7	108.1	19.3
1937	21.9	11.9	9.0[d]	40.4[d]	83.2[d]	.1	4.0	7.4	17.7	2.8	1.0	32.9	4.1
1938	59.1	31.2	22.2[d]	40.8[d]	153.3[d]	.7	5.1	2.8	12.2	2.4	1.1	23.6	1.0
1939	90.8	38.3	64.1[d]	61.1[d]	254.3[d]	.6	4.7	13.9	70.1	4.8	1.5	95.0	7.1

* 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] Excluding new-crop wheat. See *The Wheat Situation,* August 1939, p. 4.

TABLE VI.—UNITED STATES FLOUR PRODUCTION, EXPORTS, AND NET RETENTION, MONTHLY, SEPTEMBER–AUGUST 1938–39, WITH COMPARISONS*

(*Thousand barrels*)

Month or period	Production						Net exports and shipments to possessions			Estimated net retention		
	All reporting mills			Estimated total								
	1936–37	1937–38	1938–39	1936–37	1937–38	1938–39	1936–37	1937–38	1938–39	1936–37	1937–38	1938–39
Sept.	8,708	9,234	9,699	9,284	9,782	10,285	470	496	444	8,814	9,286	9,841
Oct.	9,120	9,446	9,634	9,733	10,006	10,217	361	533	571	9,372	9,473	9,646
Nov.	8,019	8,698	8,838	8,558	9,234	9,372	307	512	466	8,251	8,722	8,906
Dec.	8,216	8,168	8,416	8,778	8,670	8,925	401	510	607	8,377	8,160	8,318
Jan.	8,180	8,116	8,476	8,739	8,625	8,989	358	415	544	8,381	8,210	8,445
Feb.	7,536	7,572	7,757	8,051	8,047	8,226	398	430	698	7,653	7,617	7,528
Mar.	8,402	8,600	8,951	8,939	9,149	9,492	370	518	612	8,569	8,631	8,880
Apr.	8,340	7,834	8,244	8,844	8,334	8,742	378	481	803	8,466	7,853	7,939
May	7,542	7,739	8,516	7,998	8,207	9,030	420	559	853	7,578	7,648	8,177
June	7,637	8,474	8,440	8,098	8,986	8,950	356	457	671	7,742	8,529	8,279
July	8,415	8,507	8,432	8,914	9,021	8,942	308	447	986	8,606	8,574	7,956
Aug.	8,678	9,160	....	9,193	9,714	9,788[a]	430	454	...	8,763	9,260	....
July-June ..	100,264	100,974	104,638	106,803	107,147	110,963	4,495	5,649	7,170	102,308	101,498	103,793

* Reported production and trade data from U.S. Department of Commerce, *Wheat Ground and Wheat Milling Products*, and *Statement No. 3009*. Total production and net retention are our estimates.

[a] Preliminary.

TABLE VII.—INTERNATIONAL SHIPMENTS OF WHEAT AND FLOUR, WEEKLY FROM MAY 1939*

(*Million bushels*)

Week ending	Total	Shipments from							Shipments to Europe				To ex-Europe		
		North America	Argentina[a]	Australia	South Russia	Danube	India	Other countries[b]	Total	United Kingdom	Orders	Continent	Total	Brazil	Others
May 6.....	10.98	4.24	3.80	1.83	.00	.93	.00	.18	7.23	2.38	2.14	2.71	3.75	.29	3.46
13.....	12.36	5.94	3.30	1.66	.00	1.18	.00	.28	8.58	3.06	1.84	3.68	3.78	.67	3.11
20.....	15.32	6.60	3.87	2.23	.00	2.02	.00	.60	11.39	4.92	1.82	4.65	3.93	.73	3.20
27.....	17.67	7.89	4.61	3.50	.00	1.30	.00	.37	11.40	4.21	1.86	5.33	6.27	1.52	4.75
June 3.....	13.86	5.87	3.70	2.68	.00	1.06	.00	.55	11.07	5.35	2.19	3.53	2.79	.37	2.42
10.....	14.84	4.89	4.86	3.20	.00	1.29	.00	.60	12.37	4.89	3.69	3.79	2.47	.46	2.01
17.....	17.16	5.23	7.81	1.34	.00	2.04	.00	.74	14.64	4.96	5.07	4.61	2.52	.71	1.81
24.....	13.48	4.44	5.36	1.53	.00	1.44	.00	.71	10.06	3.58	3.18	3.30	3.42	1.19	2.23
July 1.....	12.49	3.89	3.70	1.84	.00	2.39	.00	.67	9.85	2.33	3.32	4.20	2.64	.80	1.84
8.....	12.62	5.37	4.37	1.46	.41	.79	.00	.22	10.00	4.14	3.17	2.69	2.62	1.00	1.62
15.....	11.22	2.84	3.66	1.86	.68	1.38	.00	.80	9.29	3.35	1.85	4.09	1.93	.91	1.02
22.....	8.82	4.06	2.28	1.11	.00	.88	.00	.49	5.58	2.27	.94	2.37	3.24	1.02	2.22
29.....	9.57	3.11	2.08	1.70	.00	2.23	.00	.45	6.63	2.05	1.70	2.88	2.94	.31	2.63
Aug. 5.....	9.01	3.92	3.24	.88	.00	.48	.00	.49	6.55	2.61	1.72	2.22	2.46	.74	1.72
12.....	10.37	4.86	3.54	.88	.26	.49	.00	.34	8.09	2.76	1.43	3.90	2.28	.92	1.36
19.....	10.90	5.83	2.67	1.16	.00	.74	.00	.50	8.61	3.96	1.55	3.10	2.29	.21	2.08
26.....	11.15	3.84	4.24	1.69	.00	.98	.00	.40	7.97	3.32	1.18	3.47	3.18	.77	2.41
Sept. 2[c]....	7.22	2.68	2.77	.29	.19	.52	.00	.77	5.73	1.79	1.14	2.80	1.49	...	....
9[c]....	10.27	4.81	4.67	....[d]	.00	.38	.00	.41	9.05	5.92		3.13	1.22	...	....
16[c]....	6.21	2.35	2.84	....[d]	.00	.20	.00	.82	5.03	....		....	1.18	...	....

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

[a] Including Uruguay. [b] North Africa, etc. [c] Preliminary. [d] Not received.

TABLE VIII.—NET EXPORTS AND NET IMPORTS OF WHEAT AND FLOUR, MONTHLY FROM AUGUST 1938, WITH SUMMATIONS AND COMPARISONS*

(Million bushels)

A. NET EXPORTS *(In parentheses, net imports)*

Month or period	United States[a]	Canada	Australia	Argentina	Hungary	Yugoslavia	Rumania	Bulgaria	Morocco	Algeria	Tunis	Turkey	India	USSR
Aug.	11.75	7.19	9.63	5.15	2.12	1.59	3.77	.00	.54	.09	.07	.00	2.57	9.88
Sept.	4.66	13.90	6.28	4.55	5.69	.72	2.00	.00	.79	(.13)	.14	.33	.68	7.79
Oct.	4.56	26.63	5.33	4.38	3.34	1.13	3.38	.00	.41	.19	.37	.26	(.79)	9.07
Nov.	6.19	23.77	3.92	3.93	1.97	.39	7.56	.00	.32	.17	.23	.33	(.28)	...
Dec.	6.78	17.48	6.21	4.18	.87	.26	3.92	.00	.39	.14	.24	.13	(.28)	...
Jan.	11.92	9.42	9.89	9.88	1.46	.22	4.27	.00	.37	(.04)	.38	.50	(.87)	...
Feb.	11.04	7.02	10.22	7.81	2.95	.33	3.25	.00	.42	.08	1.26	.26	(.98)	...
Mar.	10.46	8.12	9.62	13.36	1.91	.21	2.28	.13	.37	.23	.44	.06	(.66)	...
Apr.	8.78	4.05	9.71	15.79	2.80	.37	2.86	.08	.26	.25	.29	.04	.02	...
May	13.68	15.62	9.32	17.45	2.70	.13	2.48	1.51	.14	.20	.25	...	(.34)	...
June	6.10	16.29	9.58	24.27	1.85	.00	3.71	.75	...	.29	...	...	(.17)	...
July[b]	6.58	15.51[c]	6.17	....	1.98	...	...	...	...	...	...	...	...	...
1938–39[d]	102.50	165.00	95.88	124.25	29.64	5.50	42.00	3.20	4.30	1.60	4.30	3.50	(1.00)	34.00
1937–38	117.54	86.82	125.92	71.63	9.04	4.65	32.18	7.88	2.40	7.10	5.01	3.65	18.59	43.02

B. NET IMPORTS *(In parentheses, net exports)*

Month or period	United Kingdom	Eire	France[e]	Italy	Germany	Austria	Czecho-Slovakia[f]	Switzerland	Belgium[g]	Netherlands	Denmark	Norway	Sweden	Portugal
Aug.	20.44	1.05	.84	.84	2.30	.27	.59	1.10	4.28	2.84	.56	.52	.26	.27
Sept.	18.07	.98	1.06	.22	3.53	.03		2.03	3.59	3.03	.29	.44	.15	.52
Oct.	16.20	2.19	1.25	.64	9.81	.68	.05	1.93	2.86	2.25	.76	1.52	.15	.04
Nov.	19.01	1.24	(.18)	.29	5.79	1.41		1.36	4.41	2.50	.72	.93	.44	.05
Dec.	15.43	1.98	(.61)	.65	4.21	1.14	(.32)	1.83	.88	2.49	.31	.67	.15	1.10
Jan.	14.00	.88	(.63)	.39	1.07	.54	(.88)	1.45	.82	1.92	.55	.30	.03	.06
Feb.	19.39	.90	(.61)	.82	2.21	.54	(.50)	1.26	2.55	1.76	.26	.44	(.13)	.02
Mar.	26.01	1.52	(1.75)	.82	2.52	1.12	(.27)	1.02	3.56	3.02	.39	.45	.01	.05
Apr.	15.20	2.33	(.29)	1.00	2.86		(.20)	.79	2.33	2.13	.28	.69	.17	.03
May	16.99	.63	(1.67)	1.48	.91		.06	1.29	3.73	2.14	.24	.71	.15	.05
June	22.17	1.78	(3.76)	3.53	.88		.11	1.52	6.54	2.72	.39	1.11	.16	.05
July[b]	27.33	1.60	...	2.47	1.14		...	1.51	2.09	3.56	.32	...	...	...
1938–39[d]	230.24	17.08	(7.00)	13.15	42.96		(1.50)	17.09	37.64	30.36	5.07	8.10	1.70	2.30
1937–38	229.54	13.12	15.56	4.37	38.42	7.64	1.44	14.95	37.04	24.14	6.56	7.03	(.75)	2.39

B. NET IMPORTS *(In parentheses, net exports)*

Month or period	Poland	Lithuania	Latvia	Estonia	Finland	Greece	Syria, Lebanon	Egypt	Japan	Manchukuo	China	Cuba[h]	South Africa	New Zealand
Aug.	(.10)	(.03)	.18	.00	.36	1.94	(.04)	.00	(1.79)	1.39	1.17	.49	1.42	.23
Sept.	(.17)	(.07)	.00	.02	.40	.54	.05	.02	(.90)	1.33	.61	.36	.28	.07
Oct.	(.50)	(.02)	.00	.00	.36	.56	.17	.00	(.91)	1.40	1.82	.43	.01	.17
Nov.	(.20)	(.14)	.00	.00	.20	1.52	.01	.01	(1.81)	1.18	1.21	.37	.00	.06
Dec.	(.28)	(.18)	.31	.00	.08		(.02)	.01	(.75)	2.07	.07	.43	.00	.13
Jan.	(.42)	(.27)	.00	.00	.09	.61	(.26)	.01	(.50)	.72	.31	.44	.00	.05
Feb.	(.24)	(.15)	.00	.00	.11	.48	(.23)	.01	(.51)	.62	1.52	.54	.01	.64
Mar.	(.27)	(.08)	.00	.00	.10	.63	(.15)	.06	(.33)	...	3.38	.41	.00	.25
Apr.	(.28)	(.04)	.00	.00	.08	1.18	(.15)	.05	(.19)	...	5.28	.35	.01	.33
May	(.35)	.00	.00	.00	.10	2.04	(.22)	.01	(.35)	...	5.87	.42	...	.89
June	(.16)	...	...	.00	.29	...	...	.01	(.58)	...	...	.40	...	.38
July[b]	(.14)	...	...	...	...	...	...	...	(1.21)	...	...	.39	...	...
1938–39[d]	(3.11)	(1.10)	.50	.02	2.35	13.00	(.90)	.21	(9.83)	13.00	28.00	5.03	1.75	3.30
1937–38	(.43)	(.08)	.95	.16	3.01	18.26	.91	(.57)	(9.97)	5.74	8.76	4.95	.93	4.53

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

[a] Includes shipments to possessions.
[b] Figures preliminary for many countries.
[c] Gross exports for August were 11.98 million bushels.
[d] Including our estimates for missing monthly data.
[e] Net trade in "commerce général."
[f] Old boundaries through September; excluding Sudeten, October through March 15. Bohemia-Moravia thereafter.
[g] Including Luxemburg.
[h] Gross imports of flour from the United States.

TABLE IX.—WHEAT DISPOSITION ESTIMATES, ANNUALLY FROM 1934–35*

(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[a]	Total[b]			
	A. UNITED STATES (JULY–JUNE)									
1934–35....	274	526	800[d]	450	83	+120	653	147	(1)[e]	148
1935–36....	148	626	774[d]	466	88	+106	660	114	(28)[e]	142
1936–37....	142	627	769[d]	471	97	+141	709	60	(23)[e]	83[f]
1937–38....	83[f]	876	959	468	95	+136	699	260	107	153[f]
1938–39[g]...	154[f]	931	1,085	470	78	+152	700	385	110	275[f]
1938–39[h]...	153[f]	931	1,084	475	78	+168	721	363	109	254[f]
1939–40[h]...	254[f]	736	990	475	85	+145	705	285	...	...
	B. CANADA (AUGUST–JULY)									
1934–35....	193	276	469	43	32	+27	102	367	165	202
1935–36....	202	282	484	45	33	+44	122	362	254	108
1936–37....	108	219	327	44	34	+21	99	228	195	33
1937–38....	33	180	213	43	33	+26	102	111	87	24
1938–39[g]...	23	350	373	44	33	+21	98	275	145	130
1938–39[h]...	24	350	374	48	35	+31	114	260	165	95
1939–40[h]...	95	449	544	43	35	+31	109	435	...	...
	C. AUSTRALIA (AUGUST–JULY)									
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....	43	151	194	32	15	+ 6	53	141	102	41
1937–38....	41	188	229	33	15	+ 5	53	176	126	50
1938–39[g]...	50	151	201	34	13	+ 9	56	145	90	55
1938–39[h]...	50	154	204	33	14	+11	58	146	96	50
1939–40[h]...	50	160	210	34	13	+ 8	55	155	...	...
	D. ARGENTINA (AUGUST–JULY)									
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....	65	249	314	70	23	+ 8	101	213	162	51
1937–38....	51	185	236	71	25	+ 3	99	137	72	65
1938–39[g]...	65	320	385	71	22	+12	105	280	105	175
1938–39[h]...	65	336	401	71	22	+ 9	102	299	124	175
1939–40[h]...	175	235	410	71	22	+ 7	100	310	...	...

* Based on official data so far as possible; see WHEAT STUDIES, December 1938, Table XXX.

[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] Not including net imports.

[e] Net imports.

[f] Excluding new-crop wheat in some positions.

[g] Estimates as of May 1939.

[h] Estimates as of September 1939.

TABLE X.—SELECTED WHEAT PRICES, WEEKLY FROM MAY 1939*

(U.S. cents per bushel)

Week ending	Futures							United States cash					
	Liverpool		Winnipeg		Buenos Aires	Chicago		Basic cash (Chi.)	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[a]	Oct.	July[b]	Oct.	Oct.[c]	July[d]	Sept.						
May 6	63	65	65	66	60	73	73	78	74	82	82	78	73
13	62	65	66	67	60	74	74	80	75	83	83	78	71
20	62	64	65	66	60	74	74	79	76	81	86	78	71
27	61	64	65	66	60	77	77	81	78	85	89	81	72
June 3	61	64	65	66	60	78	78	79	79	85	89	82	73
10	58	62	62	63	60	75	76	78	76	81	85	80	72
17	56	60	61	62	60	73	73	75	72	77	84	76	73
24	55	59	59	60	60	70	71	72	69	75	82	73	72
July 1	55	59	59	60	60	71	72	73	70	72	84	75	73
8	54	58	58	59	60	68	69	69	69	70	81	72	71
15	52	56	54	55	60	66	67	68	65	68	81	69	69
22	50	53	53	53	60	65	66	66	65	68	75	68	69
29	49	52	51	51	60	66	63	64	62	66	74	76	67
Aug. 5	58	54	58	53	60	66	65	66	67	69	77	78	69
12	58	52	56	52	60	65	64	66	63	67	75	78	69
19	56	51	56	52	60	66	66	67	64	69	76	80	69
26	57	53	61	57	58	69	68	70	67	71	78	82	70
Sept. 2	54	51	63	58	55	71	70	72	68	73	81	83	71
9	..	..	76	72	54	86	85	86	87	94	95	98	84
16	..	..	74	69	53	87	85	86	..	..	..	..	..

Week ending	British parcels	Liverpool (Tuesday prices)					European domestic				Winnipeg		Buenos Aires 80-kilo
		No. 1 Man.	No. 3 Man.	No. 1 Dk. H.W.[e]	Arg., Rosafé	Australian	Great Britain	France[f]	Germany[f]	Italy[f]	Wtd. average	No. 3 Man.	
May 6	69	82	71	..	63	69	59				61	58	59
13	68	83	76	..	63	71	61	156	234	212	63	59	59
20	65	82	75	..	61	70	63	(216.0)	(214)	(148)	62	57	59
27	64	82	75	..	61	70	64				62	58	59
June 3	68	83	75	..	62	69	63				62	58	59
10	71	80	72	..	60	64	62	157	234	212	59	55	59
17	63	77	70	..	57	63	61	(217.5)	(214)	(148)	58	54	59
24	58	78	70	..	57	63	60				57	52	59
July 1	62	75	67	..	56	58	59				56	52	59
8	64	76	67	..	55	60	59	158	212[g]	212	56	51	59
15	63	72	64	..	54	58	59	(219.0)	(194)[g]	(148)	52	47	59
22	56	71	62	56	50	56	58				51	46	59
29	57	67	59	53	49	53	56				49	44	59
Aug. 5	56	70	62	58	52	56	55				51	46	59
12	57	71	63	..	50	55	56	140	213	212	51	45	59
19	56	68	60	57	50	..	56	(197.5)	(196)	(148)	50	45	59
26	55	74	67	59	51	56	51				56	51	..
Sept. 2	55	..	..	..	53	..	..				57	52	..
9	..	..	..	..	..	..	..				71	66	..

* 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, *Wirtschaft und Statistik;* 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] March future from August 1.
[b] May future from August 1.
[c] July future through June 3.
[d] May future from July 24.
[e] Dark Hard Winter.
[f] Fixed prices. Data in parentheses are prices in francs, marks, and lire per quintal, respectively.
[g] Prices from July 16; June prices applied previously.

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