WHEAT STUDIES

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WORLD WHEAT SURVEY AND OUTLOOK MAY 1939

V. P. Timoshenko and Holbrook Working

World wheat supplies for the crop year now closing were of record size. The year's disappearance will be exceptionally large, swelled by absorption of wheat in low-price outlets, notably the Orient and some countries where the level of wheat consumption rises when home-grown wheat is abundant. Feed use of wheat in the major exporting countries and Continental Europe will not attain levels reached in some earlier years of burdensome world surplus. The world carry-over will probably be larger than any except that of 1934. Among the exporting countries, Argentina alone will hold stocks of record size. Large stocks in Europe will consist in substantial part of security reserves.

The volume of the world wheat trade in 1938–39 now seems likely to approximate 585 million bushels, in terms of net exports. This is more than we anticipated last January, before the extent of expansion in Oriental takings could be appraised.

Prices in England and in the major exporting countries moved at an extraordinarily low level with only minor fluctuations from January to late April, when an advance in North American markets was prompted by news of crop deterioration. In relation to British prices, those in the United States, Argentina, and perhaps Canada gained support from governmental operations during the period under review. The world crop of 1939 will probably fall much below the crop of 1938, and total supplies of 1939–40 somewhat below those of 1938–39. Liverpool prices may rise somewhat in the next few months, but the pressure of stocks in the hands of governmental agencies in exporting countries can probably be counted upon to restrain advances. Present premiums of Chicago over Liverpool may decline, as may those of Winnipeg over Liverpool if the new Canadian crop is even of moderate size.

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WORLD WHEAT SURVEY AND OUTLOOK MAY 1939

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The 1938 wheat crop ex-Russia now appears some 440 million bushels larger than the previous record-breaking crop of 1928. World wheat supplies from the big crop and a small inward carryover stand about 140 million bushels above the previous record of 1933–34, and are 750 million larger than in 1937–38.

Recent heavy shipments to the Orient indicate that enlarged absorption of wheat there will facilitate disposition of the excessive supplies, but there is little or no evidence of heavy feed use of wheat in Continental Europe. Wheat disappearance in 1938–39 will probably be of record volume in the world ex-Russia ex-China as a whole, though not in the four chief exporting countries or in importing Europe. Somewhat enlarged European takings, as compared with 1937–38, reflect not so much larger utilization as accumulation of security stocks in several countries, which the increasingly tense political situation has accelerated beyond our expectations expressed last January.

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The volume of wheat trade with Europe during January–April was about in line with our anticipations, but trade with ex-Europe was larger. Trade with both destinations was larger this year than last, and total trade in August–April has run about 40 million bushels larger this year. Practically all of a small increase in European trade is traceable to the British Isles. Trade with Continental Europe failed to improve, although several countries, including Germany, imported more than enough to cover their current requirements, in order to build up stocks. The principal factor in the larger increase of shipments to ex-Europe was the heavy taking of wheat by China and Manchukuo.

Expansion of the Oriental market substantially facilitated Australian exports. Exports of the other chief exporters were dominated by governmental agencies. Subsidization of exports from the United States was intensified in February–March, and by the beginning of April export sales had slightly exceeded the announced goal of 100 million bushels. The Canadian Wheat Board continued a policy of free selling. Argentina's share of world exports in the winter months was disproportionately small in relation to her crop, since the Grain Regulating Board avoided pressing sales.

Wheat futures prices in the principal markets fluctuated within extraordinarily narrow limits from early January to late April, and at a notably low level. Slight weakness at Liverpool reflected export pressure, and occurred in the face of accentuated political tension in Europe. But at Chicago and Buenos Aires, prices gained support from governmental operations. A price advance began late in April in North America, on reports of deterioration of growing crops, but Liverpool responded only feebly.

The volume of international trade in 1938–39 now seems likely to be somewhat larger than we anticipated in January—probably nearer to 585 than to 560 million bushels in terms of net exports from net-exporting countries. Shipments as reported by Broomhall may approximate 570 million bushels, including about 435 million to Europe and 135 million to ex-Europe. The change in the outlook is mainly in the ex-European trade, and the slight upward revision of probable European takings involves larger imports only into the British Isles.

The expansion of Oriental trade alters the outlook for the probable distribution of exports by sources, and Australia now seems

likely to export 90 million bushels rather than 65 million as we expected in January. Argentina, with small winter exports, may not ship out more than 105 million. United States July–June exports will exceed the goal of 100 million bushels by about 10 million, while Canadian exports may not go beyond 145 million.

World wheat stocks at the end of 1938–39 may approximate 1,145 million bushels, only about 60 million below the record stocks of 1934. Argentine stocks on August 1 will probably exceed the previous record of 1929 by 50 million bushels, or nearly 40 per cent. Australian stocks may be little larger this year than last. The prospective carryovers of the two North American exporters, though large, will by no means be of record size. Year-end stocks in all four of the chief exporting countries now seem likely to range around 635 million bushels, more than twice as large as last year's but also not of record size. European stocks promise to increase greatly this year but will be smaller than in 1934 or in 1935; and a large fraction will consist of security reserves under governmental control, which seem unlikely to be soon reduced under prevailing or prospective political conditions.

The world wheat crop of 1939 will almost certainly be smaller than the bumper crop of 1938, probably by such a margin that 1939–40 supplies from crop, carryover, and prospective Russian exports will fall short of the supplies of 1938–39. Under such circumstances, futures prices at Liverpool may tend upward in the next few months; but the prospective advance seems unlikely to be large even with unfavorable crop developments. Competition for sale of old-crop stocks, by governmental agencies in exporting countries, can probably be expected to restrain advances at Liverpool. Except temporarily, Chicago futures prices seem likely to advance less than Liverpool futures. Such changes as may be made in export subsidy rates on American wheat would presumably tend to support Liverpool prices and depress Chicago prices relatively. If the new Canadian crop should be even moderately large, Winnipeg futures after August are not likely to hold premiums over Liverpool futures as high as those recently prevailing.

Wheat Supplies

The world wheat crop of 1938 ex-Russia, appraised on a basis that includes some further net upward revisions, now appears 440 million bushels larger than even the record crop of 1928. With so huge a crop, total world supplies in the current year stand 140 million bushels above the previous record of 1933–34, although this year's inward carryover was approximately 500 million bushels smaller than that of 1933–34. The total supplies of 1938–39 are about 750 million bushels larger than those of 1937–38, as appears in the tabulation below in million bushels. The change in the supply position, from moderate tightness in 1937–38 to record superabundance in 1938–39, was unprecedented in postwar years, though similar changes were experienced in 1898 and 1915.

Year	Acreage	Crop	Initial stocks	USSR exports	Total supplies	Disappearance
1927–28..	250.2	3,705	647	2	4,354	3,657
1928–29..	266.4	4,037	697	..[a]	4,734	3,777
1931–32..	265.8	3,873	1,001	65	4,939	3,938
1933–34..	271.1	3,810	1,133	34	4,977	3,774
1934–35..	264.3	3,490	1,203	2	4,695	3,736
1935–36..	267.3	3,557	959	29	4,545	3,761
1936–37..	274.2	3,508	784	5	4,297	3,764
1937–38..	283.8	3,787	533	43	4,363	3,762
1938–39						
Jan....	286.2	4,440	601	37	5,078	3,943[b]
May...	285.2	4,479	601	37	5,117	3,972[b]

[a] Net import. [b] Our forecast.

The change in wheat supplies from 1927–28 to 1928–29, though less spectacular, was more sudden and unpredictable than the larger change from 1937–38 to 1938–39. Continuous but gradual expansion of the wheat acreage since 1934 failed to result in great increase of wheat supplies before 1938 only because of a sequence of poor crops in North America and in some of the other chief wheat-producing countries. All observers of the world wheat market were aware that, on the huge acreage that had already been reached in 1937, the first satisfactory yield would result in superabundance of wheat. In 1927, acreage was not so extended that surplus could be expected to emerge in the absence of further increase in acreage and extraordinary yield per acre.

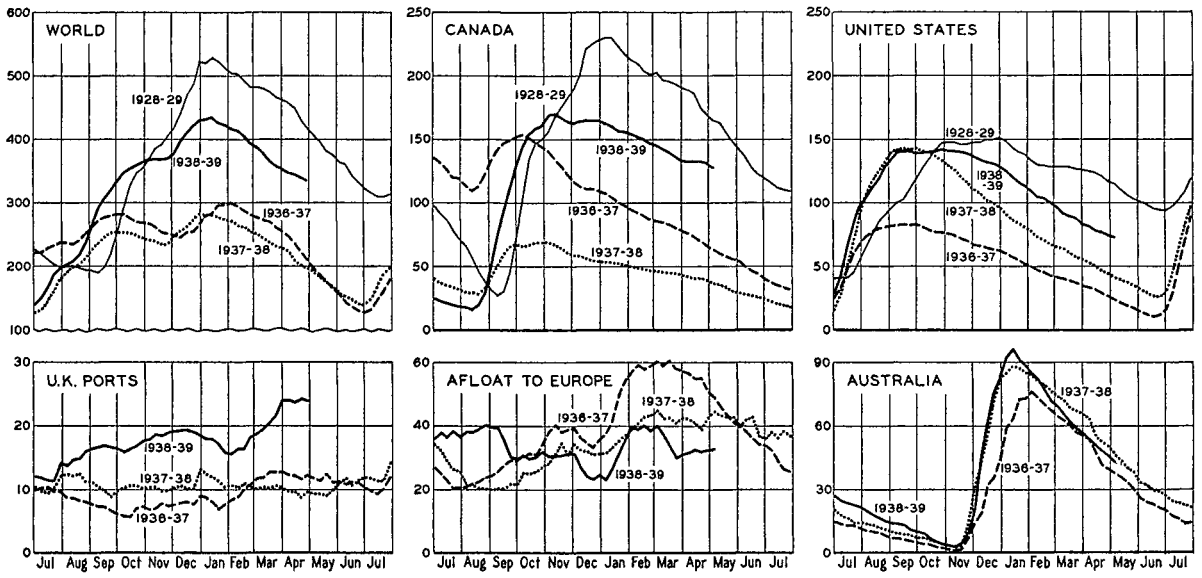
Increase in crop estimates since January occurred largely in Europe. The French estimate, based on declarations of producers and revealed in the Central Council of the French Wheat Board, indicated wheat production of 358 million bushels, about 13 million bushels above the preliminary figure carried in our January "Survey" and some 38 million above the preliminary estimate of the Wheat Board in August 1938. This brought the French crop close to the record one of 1933, and intensified the problem of disposition of surplus by government measures. The German crop estimate was raised to 205 million bushels, also close to the record crop of 1933.

An upward revision of the Yugoslavian crop by more than 10 million bushels brought it 4 million above the record large crop of 1936; that the Southern Hemisphere total runs only 26 million smaller than the record crop of 1928.

"World" visible supplies continued to be strikingly unrepresentative of total quantities of available wheat, failing adequately to reflect the huge world surplus. Through mid-May 1939 (Chart 1) the level of visibles has remained substantially lower than in 1928–29 when world wheat supplies were smaller than in the current crop year. Moreover, visibles declined rapidly during January–March—more rapidly than in 1928–29, although the movement of wheat into international trade was only about 60 per cent of the volume of trade in 1928–29; and also more rapidly than in other years of large wheat surplus, 1930–31 to 1933–34, in spite of smaller international

CHART 1.—WHEAT VISIBLE SUPPLIES, WEEKLY FROM JULY 1938, WITH COMPARISONS*

(*Million bushels*)



* Weekly data for certain series summarized by months in Table IV. Note that scales are not uniform throughout.

but in the light of recent information on tendencies in marketing and prices in Yugoslavia, the revised estimate seems somewhat high. Production in the Danube basin is now estimated as much as 60 million bushels above the record crop of 1936. In the Southern Hemisphere, the high January estimate of the Argentine crop was raised by 4 million bushels and that of the Australian crop by 6 million, so

trade this year. The rapidity of decline through March 1939 thus gave an impression of much heavier absorption of wheat into channels of trade and consumption than actually occurred.

The rapid reduction of world visibles during January–March was more striking in the United States and Australia than in Canada. In the other components of smaller magni-

tude—stocks in Argentine ports, in British ports, and afloat to Europe—increase rather than decline occurred. British port stocks, indeed, rose to the exceptionally high level of 24 million bushels by the end of March. Argentine port stocks, for which actual reports have not been published for the past three or four months, are believed by Broomhall to have increased from 10 to about 25 million bushels during January–March.[1]

During April, the rate of decline in world visibles slackened, in reflection of developments especially in Canada. The net decline from January 1 was smaller through April this year than it had been in 1929. But although by mid-May the level of visible supplies was beginning to reflect more accurately the superabundance of wheat in the world ex-Russia, it was still much too low as compared with 1928–29 or with other recent years of somewhat smaller wheat supplies. Invisible wheat stocks were of record or near-record size in Argentina, the United States, the Danube basin, and a number of countries in importing Europe.

Utilization and Stocks

Heavy shipments of wheat to the Orient in recent months indicate that this year, as in others of large wheat surplus and low prices, increased takings of wheat by the Orient will somewhat facilitate disposal of excessive supplies. Small wheat crops in China and Manchukuo and disruption of communications between various regions of China have hampered the transportation of foodstuffs from interior provinces to the coast, and swelled requirements for imported wheat and flour. At present both wheat and flour are free of duty not only in North China ports but also in Shanghai. The heavy autumnal flow of wheat into British India, which occurred in spite of her large crop of 1938 under the influence of poor prospects for the next harvest, was checked by the import duty of about 28 cents per bushel, imposed on December 7, 1938; but some imports have continued.

In Continental Europe, however, there is not as much evidence of heavy feed use of wheat this year as in previous years of large wheat supplies and low prices. Numerous governmental interventions in most countries now either directly prohibit such use of wheat (Germany) or hamper it by maintenance of wheat prices high in relation to prices of other grains; and there are only a few countries where feed use seems substantial.

On the basis of data now available, it seems probable that wheat disappearance in the world ex-Russia ex-China in 1938–39 will be of record volume. It may reach a total some 35 million bushels above the record estimated disappearance in 1931–32. But the high figure suggested for 1938–39 rests somewhat upon "statistical" consumption of wheat in a few countries whose crop estimates seem to us overstated, and if these estimates are later revised downward, the estimates of world disappearance will also be reduced.

A correspondingly high level may not appear in the four chief wheat exporters and in Europe ex-Danube. In these areas domestic utilization of wheat is likely to be somewhat higher than in several preceding years, but below the high figures for 1930–31 to 1932–33 in exporting countries, and below the high levels of 1928–29 and 1933–34 to 1935–36 in Europe ex-Danube. The record large crops of 1938 in British India, the Danube countries, and some countries of the Near East are primarily responsible for bringing present estimates of world wheat disappearance in 1938–39 to a seemingly record level. These countries utilize much wheat when their domestic crops are large; hence the accident of geographical distribution of crops is in substantial part the cause of prospective heavy world utilization of wheat in the current year.

Importing countries.—Among the European countries in which feed use of wheat is important in years of low prices, the United Kingdom seems to be the only one where feed use of wheat has risen substantially in the current year as compared with the two preceding. Rough approximations of wheat dis-

[1] Broomhall's approximations have appeared weekly in his cabled service but not in his *Corn Trade News*. We infer that they are regarded as too unreliable for publication in the journal. We use them in calculating world visibles, but suspect that they do not fully reflect the increase in Argentine stocks at country stations and in ports.

appearance during August–March are shown in million bushels in the following tabulation:

Crop year	Aug.–Mar.[a]	Year[b]
1934–35	186	275
1935–36	196	268
1936–37	173	258
1937–38	169	254
1938–39	189	...

[a] Reported farm deliveries for 34 weeks multiplied by 2.4, plus net imports in August–March, plus the amount by which port stocks were decreased or minus the amount by which port stocks were increased during the period.

[b] Crop plus initial stocks, plus net imports, minus estimated year-end stocks.

The increase of August–March disappearance from 169 to 189 million bushels between 1937–38 and 1938–39 is perhaps overstated, for stocks not accounted for in the calculations may have been larger on April 1 this year than last. Under present political conditions it is by no means clear that port stocks represent as large a proportion of the total accumulation of wheat stocks in the United Kingdom as they did last year. Yet there are indications that the larger part—perhaps some 11 or 12 million bushels—of the apparent increase in utilization is real, and represents increased feed use of wheat.

An analysis of German statistics of production, trade, stocks, and mill grindings of wheat indicates that wheat utilization cannot have risen in Germany. The use of wheat and rye for feed has been prohibited since January 1937, and the prohibition is rigidly enforced. Hence decline in wheat disappearance in August–February 1938–39 as compared with 1937–38, as shown in million bushels in the tabulation below, points toward decline in human consumption or overstatement of wheat stocks in February. Decline of wheat consumption cannot be explained as a shift to consumption of rye bread, for similar statistics on rye indicate that rye disappearance also declined slightly in 1938–39.

Statistics of wheat milled in large establishments included in the above tabulation do not indicate decline as do the statistics of wheat disappearance; and the evidence seems somewhat contradictory even with allowance for the probability of greater decline in grindings of small mills than of large. German stocks of wheat and flour on February 28, 1939 were 70 million bushels above those a year before, and 26 million above similar stocks in 1933–34, when governmental measures were employed in disposing of a wheat surplus. Inconsistencies between statistics of wheat disappearance and of wheat grindings suggest possible overstatement of stocks.[1] But there can be no question about the existence of record stocks of wheat and flour in warehouses and flour mills, in view of complaints about shortage of storage to handle deliveries from producers and of specific governmental measures to check farm offerings. The government increased monthly premiums to farmers on wheat delivered during March–June instead of reducing them as was announced at the beginning of the season.

Aug.–Feb.	Wheat disappearance[a]	Feb. 28 stocks[b]	Flour disappearance		
			Wheat ground[c]	Net flour imports[d]	Total[d]
1933–34	102	122	88	(7.6)	80
1934–35	114	118	83	(1.2)	82
1935–36	122	102	88	(.8)	87
1936–37	136	55	92	(.2)	92
1937–38	130	78	85	1.9	87
1938–39	118	148	85	1.0	86

[a] Crop plus initial stocks, minus net exports or plus net imports in the months covered, minus reported stocks at the end of the period.

[b] Wheat and flour in terms of wheat.

[c] In mills with daily capacity above 3 tons.

[d] In terms of wheat; net exports in parentheses.

The statistics above relate to the former territory of Germany. Annexation of the Sudetenland last October made Germany more dependent on imported wheat, for this territory is characteristically a deficit region; and even before Bohemia-Moravia and Slovakia were made German protectorates in March, a form of customs union between these regions and the Sudeten area was established and they continued to supply the Sudeten area with grain (presumably recorded in German net imports). With the establishment of the protectorate over Bohemia-Moravia, Germany not only obtained control of the grain-security reserve of what was formerly Czecho-Slovakia, including a substantial quantity of wheat, but

[1] Preliminary data for August–March also indicate overstatement of stocks as of February 28, up to about 10 million bushels.

also acquired territory which in recent years has been more than self-sufficient in wheat. With a large wheat crop in 1938, the new German protectorates are wheat-surplus areas, even though the principal wheat-surplus area of Slovakia was acquired last fall by Hungary. This acquisition by Hungary is not offset by later occupation of Carpathian Ukraine, an area deficient in all the bread grains. Thus Hungary is left with an additional surplus of some 5 million bushels of wheat difficult to dispose of under present conditions, as is evidenced by plans to denature wheat there for use as feed.

From the scanty information released by the French Ministry of Agriculture, it seems clear that the program of surplus removal in France has proceeded rather slowly. It has been announced that by January 31 some 13 to 14 million bushels had been effectively disposed of by export and denaturing, but how much was actually denatured and used for feed is not clear.

By the end of January the French Wheat Board had decided that exports of domestic wheat would not be completely suspended, as some groups urged after the heavy winter-killing of wheat became apparent. Exports were to be continued at a slower rate, and so with denaturing of wheat. A lower extraction rate for flour—2 kilograms below the average specific weight of wheat ground—was finally ordered in a decree of February 14. Introduced at so late a date, however, this measure can hardly be expected to enlarge utilization of wheat appreciably during the current crop year, even if rigidly enforced. The necessity of reseeding some 3 million acres or more of winter wheat has helped to absorb the surplus, but France will nevertheless carry large stocks of wheat into the next crop year. Such stocks may be regarded as desirable in view of political uncertainties and the unsatisfactory outlook for the growing crop.

In Sweden, stimulation of feed use of wheat is considered because the Swedish Grain Association has accumulated 150,000 tons of bread grain (mainly wheat) beyond the required reserve, and exports would involve considerable losses. But there is little evidence of increased feed use in other countries, such as Denmark or the Netherlands, which under similar conditions of world wheat surplus have resorted to substantial use of wheat for feed.

Exporting countries. — Data on United States wheat stocks as of April 1, 1939 provide a basis for calculation of wheat disposition during July–March, as in the following tabulation (million bushels):

Item	1934–35	1935–36	1936–37	1937–38	1938–39
Initial stocks	274	148	142	83	154
New crop	526	626	627	876	931
Net trade, July–March	+ 1	+ 24	+ 24	— 75	— 80
Total net supplies	801	798	793	884	1,005
April 1 stocks	294	271	211	332	447
Domestic disappearance	507	527	582	552	558
Net domestic millings	343	355	361	357	363
Winter-wheat seed	57	60	69	69	55
Feed and errors	107	112	152	126	140

Total domestic disappearance through March appears larger this year than last by about 6 million bushels, but substantially below disappearance in 1936–37. But since the amount of wheat used for seed was reduced this year by about 14 million bushels as compared with the two preceding years, the quantity utilized for other purposes than seed in July–March was substantially larger this year than last and only slightly smaller than the quantity so utilized in 1936–37.

More wheat was milled for domestic retention during the first three quarters of 1938–39 than in any of the four preceding years—6 million bushels more than in 1937–38, but only 2 million more than in 1936–37. With so small a margin it is possible that mill grindings for domestic use in the whole season 1938–39 will not exceed those of 1936–37; but a higher figure than in 1937–38 seems assured. The data from 1934–35 indicate that a rising tendency in domestic retention of flour is continuing during the current year, though it is less prominent than it seemed in 1936–37.

The residual item, "feed and errors," shows considerable increase in July–March 1938–39 as against the previous year, though it remains still somewhat lower than in 1936–37. This relationship depends on developments, whether statistical or actual, during January–March; for calculations based on stocks as of January 1 failed to show any increase in total domestic disappearance of wheat during the

first half of 1938–39 as compared with 1937–38, while millings for domestic retention in that period already exceeded those of the last year by about the same amount as in July–March. Apparent increase of domestic disappearance of wheat during January–March for other purposes than milling suggests increased feed use of wheat, though the suggested increase possibly rests in part on errors in statistics. Maintenance of domestic wheat prices above the world market and abundance of domestic feed-grain supplies probably tended to hamper wheat feeding. Nevertheless a real expansion in feed use in January–March seems credible because wheat prices then ruled lower in relation to domestic prices of feed grains, particularly corn, than they did a year earlier. An exceptionally strong demand for mill feed in recent months, raising mill-feed prices to high levels, points in the same direction; and so also do reports by the United States Department of Agriculture that grain fed per milk cow in February was 3 to 4 per cent higher than last year and about 25 per cent higher than in February 1937.

Presumably such information on heavier feed use of wheat during January–March induced the Department to raise its estimate of domestic disappearance of wheat in the United States in 1938–39 from 700 to 710 million bushels. We are not clear that data on wheat stocks as of April 1 provide an adequate basis for such an increase; but we raise the estimate of "feed and errors" in our calculations of disposition for the current year (Table IX) from 146 to 152 million bushels, and total domestic utilization from 695 to 700 million.

Data on Canadian wheat stocks as of April 1, 1939, similarly analyzed, show no apparent increase in total Canadian domestic wheat disappearance during August–March, even though wheat milled for domestic use was about 4 million bushels larger this year than last. The calculation leaves for feed, losses, wastes, and errors much less wheat than from the preceding year's poor crop, but this cannot be accepted as evidence of smaller feed use of wheat in Canada in the current year. As a matter of fact, the preliminary official estimate of wheat fed to livestock and poultry is 5 million bushels larger for 1938–39 than for 1937–38, and the estimate of unmerchantable wheat from the 1938 crop is put at 3.4 million bushels as against 1.7 million from the 1937 crop. The fact that calculations based on April 1 stocks result in an unbelievably small residual to cover feed use may be regarded as a further argument supporting our impression, expressed last January, that the Canadian crop of 1938 may have been underestimated[1] by 10 million bushels or thereabouts.

There is practically no direct evidence on wheat utilization in Argentina. But the fact that corn prices were substantially above wheat prices during November–January and only slightly below since February points to unusually heavy feeding of wheat in Argentina throughout 1938–39. Wheat carried over from the 1937 crop sold below the price fixed for the 1938 crop and consequently even farther below the price of corn. A ruling that the Grain Regulating Board will not accept lightweight wheat (frosted and shriveled) from the 1938 crop points in the same direction. So also does the fact that the Grain Board is studying the possibility of increasing feed use of this wheat at the expense of corn. Since the use of wheat for feed in Argentina thus seems likely to be unusually large this year, we place our estimate of total domestic utilization at 105 million bushels, some 4 million above the previous record in 1936–37.

Wheat utilization will also be larger than last year, at least statistically, in practically all countries of the Danube basin and in some countries of the Near East. In these countries utilization tends broadly to vary with size of domestic crops, which are exceptionally large this year.

International Trade

The flow of wheat and flour to Europe during January–April was about in line with what we expected last January. It was then already clear that heavy autumnal takings of wheat—the largest since 1931 and substantially larger even than in 1936—did not indicate large European imports of wheat for the whole season, for import requirements could not reasonably

[1] An estimate by the North-West Grain Dealers' Association released on March 22, 1939 indicates a crop for the Prairie Provinces slightly above the official estimate.

be estimated at a high level in view of the abundant domestic supplies, even with intentions to build up security stocks in many countries in evidence. January–April shipments to Europe indeed fell below those of last year, and far below the exceptionally heavy January–April shipments in 1937; and their weekly average, as was expected, also fell far below the weekly average during August–December 1938.

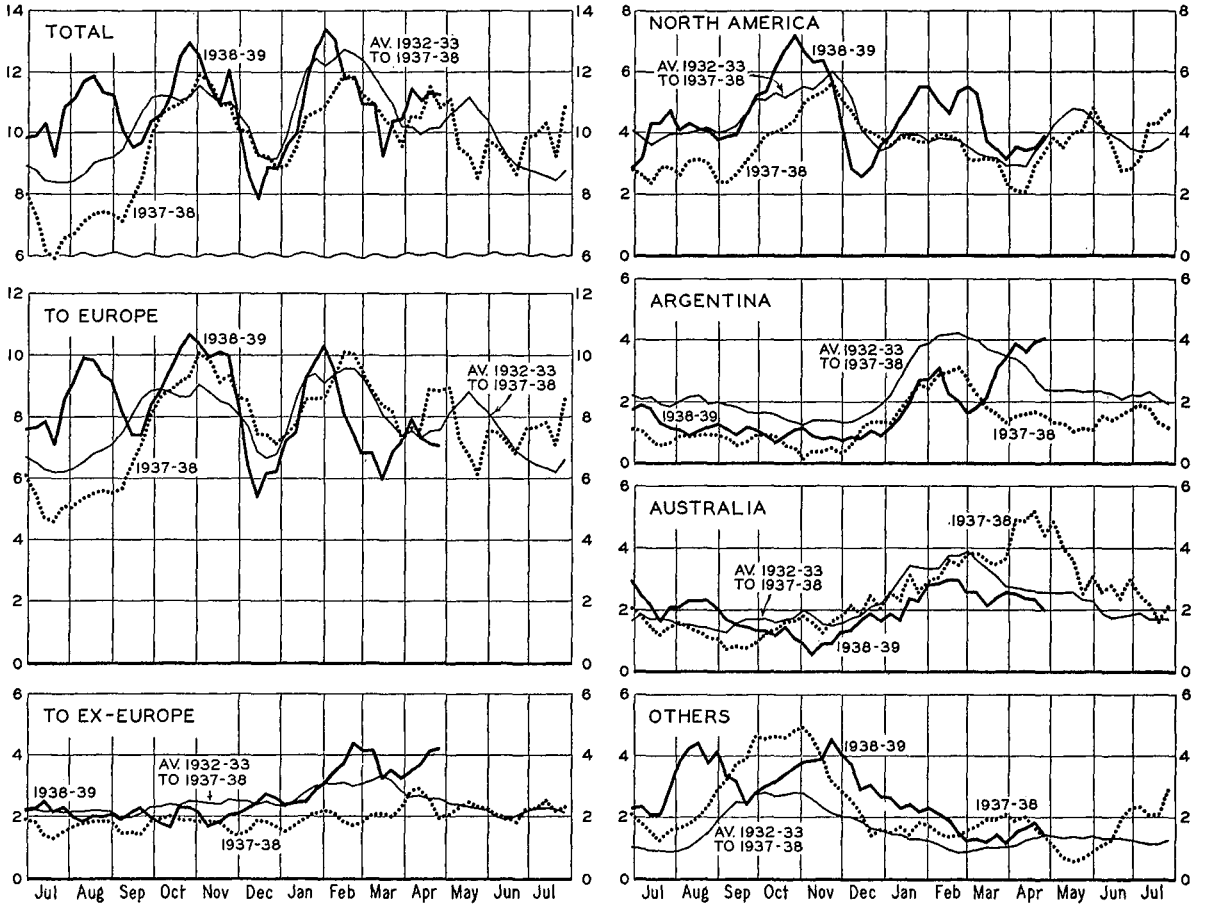
On the other hand, we failed to foresee in January the full extent of growth in the trade with ex-Europe, even though it was then clear that Oriental takings would be much larger than in other recent years and though we then found occasion to raise our September estimate of the crop-year volume of trade with ex-Europe. The Oriental trade bulked unexpectedly large in February–April, and this suggests the probability of a continuing high level in May–July. The outlook for total shipments or net exports to all destinations together has therefore changed (see p. 382).

Volume.—The unexpectedly large volume of trade with ex-Europe during January–April more than compensated for the decline of shipments to Europe below their level of last year. The total volume of January–April trade, as measured by Broomhall's world shipments, was some 10 million bushels above the last year's total, but much below the heavy January–April shipments in 1937. August–April world shipments for the current year were about 441 million bushels—more than 40 million bushels larger than last season, but about 40 million smaller than in 1936–37.

During January–April, weekly world shipments fluctuated around the average level of 1932–33 to 1937–38 (Chart 2), whereas they had been above this level in earlier months.

CHART 2.—INTERNATIONAL SHIPMENTS OF WHEAT, WEEKLY FROM JULY 1938, WITH COMPARISONS*

(Million bushels; 3-week moving averages)



* Broomhall's data; see Table VII.

The range of fluctuation during the current year was relatively wide, much wider than last year. From a trough in mid-December, much below that of the preceding year, shipments rose early in February to a much higher peak, only to decline again below last year's level in mid-March. From that point they have gradually risen in recent weeks, remaining generally on a level slightly above that of last year. Shipments to Europe, however, continued mostly below that level.

Shipments to ex-Europe, mainly the Orient, rose with rapidity during the second half of January and in February. There was some decline in March, followed by recovery in April, and the recent level has been higher not only than that of last year, but also above the average for 1932–33 to 1937–38. August–April shipments to ex-Europe (40 weeks) approximated 109 million bushels, and were the largest since 1932–33 if the exceptional shipments to the United States in 1934–35 are disregarded. Shipments in the current year were bolstered somewhat by a movement to India, which through April was 7 million bushels above last year's. But this flow was checked by the new import duty; and some cargoes afloat to India were even diverted to other destinations. The principal factor in the increase of shipments to ex-Europe was the heavy importation by China and Manchukuo. By the end of April, shipments to China, Manchukuo, and Japan combined exceeded those of last year by about 18 million bushels, whereas Japan's imports of foreign wheat have been smaller this year than last. Shipments to some other ex-European destinations, such as Brazil and Central America, also increased notably.

The following tabulation shows, in million bushels, shipments to Europe and to ex-Europe for 40 weeks (up to May 6), with comparisons. It also shows shipments to Europe as adjusted by changes in stocks afloat. As a rule, these "adjusted" shipments, which may be called "calculated arrivals," are more closely related to total European net imports than are reported shipments.

While reported shipments to Europe rose 10 million bushels between 1937–38 and 1938–39, adjusted shipments rose more than 30 million. The probability that net imports increased about as did the adjusted shipments is important because shipments data extend into May, while the latest official import statistics are

Forty weeks	Total	To Europe		To ex-Europe		
		Reported	Adjusted[a]	Total	U.S.	Others
1932–33...	492	354	344	138	..	138
1933–34...	405	307	309	98	..	98
1934–35[b]..	413	294	296	119	14	105
1935–36...	388	282	264	106	27	79
1936–37...	482	385	357	97	27	70
1937–38...	398	322	303	76	..	76
1938–39...	441	332	336	109	..	109

[a] Adjusted by subtracting from the reported data any increase in stocks afloat, or by adding any decrease.
[b] Forty weeks beginning August 5.

mostly available only through March (for several countries imports must be estimated even for March or a month or two preceding). Net-import statistics for August–March indicate a growth of trade of about 20 million bushels, and a larger increase may become apparent when net-import statistics for April become available. The enlargement of European arrivals by more than 30 million bushels in August–April suggests that even if European trade during the remainder of the season falls slightly below last year's level, as it has in recent weeks, total arrivals or net imports of Europe for the crop year may still somewhat exceed those of 1937–38.

Imports.—Details of August–March net imports by the principal European countries are shown below in million bushels. Practically all of the increase in European trade is traceable to the British Isles. Trade with Continental Europe was distributed differently than in 1937–38, but failed to show a net increase.

British and Irish imports in the current year have thus far exceeded the very low imports of 1937–38 by more than 20 million bushels, and those of 1936–37 and the recent 5-year average by more than 10 million. Imports rose even in the face of a wheat crop in the United Kingdom more than 17 million bushels larger this year than last—a quantity more than sufficient to cover increased feed use of wheat. The increase in imports, and the rapid rise in British port stocks in February–March (Chart 1, p. 367) reflect accumula-

tion of security stocks by the British government. Under the strained political circumstances of recent months, this accumulation proceeded somewhat more rapidly than we anticipated in January.

Country	5-year average[a]	1936–37	1937–38	1938–39
British Isles	144	145	135	156
Germany, Austria, Czecho-Slovakia[b]	13	7	31	37
Italy	7	24	1	5
France	7[b]	6	10	..[c]
Belgium	28	28	27	23
Netherlands	15	14	16	20
Switzerland	11	11	10	12
Scandinavia, Baltic[b]	16	12	12	13
Greece	10	14	10	8
Spain, Portugal[d]	3[b]	4	10	8
	254	265	262	282

[a] 1933–34 to 1937–38.
[b] Not deducting net exports of any country in any year.
[c] Net export.
[d] Including our approximation for Spanish imports.

Imports into Germany, including Austria,[1] were also above last year's in spite of larger crops and inward carryovers. As we have seen (p. 369), these imports were not required for utilization but went to swell German stocks further. Italian imports, on the other hand, though somewhat larger than last year's, were not heavy enough to suggest as much accumulation as most market analysts had expected. However, since Italy often concentrates takings late in the season, her imports may increase appreciably later.

French imports through March this year were slightly exceeded by exports of domestic wheat subsidized in a program of surplus removal. With more active pursuit of this program, the country could have attained substantially larger net exports by March. But after January the policy of exportation was not pressed, and France may return to a net-import basis by the end of the crop year. Not much of the big domestic surplus will be disposed of, and large stocks will be carried into 1939–40. Moderately larger imports during the current year into the Netherlands, Switzerland, and some Scandinavian countries also point toward accumulation of small security stocks, reflecting international political hazards. August–March net imports into Belgium, however, were smaller than usual. Her crop was large and millers have been required to use heavy admixtures of domestic wheat. Since the latter requirements were recently reduced (from 40 to 20 per cent), and it was decided to build up larger security stocks in ports, imports may be larger in subsequent months.

Reduced imports by Greece reflect her larger crop. Spanish imports are not directly reported, but Broomhall's data on arrivals in Spain are somewhat smaller this year than last, and this may reflect a reduction in net imports through March. However, the deal between General Franco and Argentina for 7 to 8 million bushels of wheat (recently raised to 15 million) already has been evidenced in shipments, and suggests that Spain may import substantial quantities later in the season.

All told, the larger total volume of European imports this year than last primarily reflects the building up of security stocks in a number of European countries. The increasingly tense political situation of recent months accelerated this process, and imports into several countries, particularly the United Kingdom and Germany, moderately exceeded our January expectations.

Among the non-European countries, the official import statistics suggest a greater increase in Manchukuo than in any other country. Official Chinese statistics, much delayed and presumably incomplete, do not as yet show as much increase as may be estimated from the greatly enlarged shipments to Chinese destinations.

Exports.—The augmentation of demand for wheat in the Orient and active accumulation of security stocks in Europe brought the net exports of exporting countries through March about 40 million bushels above August–March exports of 1937–38. Official data are summarized in the tabulation on page 375, in million bushels.

The margin over last year's exports remained practically the same through April,

[1] Czecho-Slovakia is on a net-export basis this year, exporting her surplus wheat to the deficient Sudeten area. We are not sure that these exports will be reported after March as foreign trade.

as may be inferred from data on world shipments, which in April were about the same this year and last. Such a volume of August–April exports somewhat exceeds our expectations expressed in January, mainly in the component of exports destined for ex-Europe. But the distribution of exports by sources of origin differs substantially from what we tentatively

Country	5-year average[a]	1936–37	1937–38	1938–39
United States	26.3[b]	.....[c]	73.0	67.4
Canada	151.2	156.4	66.2	113.5
Argentina	87.4	126.6	46.4	52.6
Australia	84.5	63.9	70.1	61.1
Danube basin[d]	27.1	63.8	45.3	58.9
USSR	28.9	3.2	36.8	35.0
India	.6	8.7	10.2	.0
Others[e]	22.7	26.1	24.1	23.3
	428.7	448.7	372.1	411.8

[a] 1931–32 to 1935–36.
[b] Without deduction of the net imports of 1934–35 and 1935–36.
[c] Net import.
[d] Hungary, Rumania, Yugoslavia, and Bulgaria.
[e] Morocco, Algeria, Tunis, Turkey, Irak, and various others such as Poland, Czechoslovakia, and Japan for years in which they ranked as net exporters.

suggested four months ago, when it was necessary to emphasize the many uncertainties involved in forecasting the distribution of exports under conditions such that trade in wheat in practically all countries is determined by various governmental agencies.

The American program of export subsidization was intensified during February–March, and on April 13 it was officially announced that sales of wheat and flour for export from July 1 had reached 101 million bushels, of which 77 million had been under subsidy. By May 1, these sales slightly exceeded 109 million bushels. It thus becomes probable that the original plan to export 100 million bushels in July–June will be appreciably exceeded.

In accordance with our expectations in January, the Canadian Wheat Board has shown no tendency to press wheat heavily, but continues to follow a policy of free selling. In reflection of the American and Canadian policies, there was relative abundance of North American wheat on the European import market during the winter. This appears from the course of North American shipments (Chart 2, p. 372), showing an unusual bulge in January–March. Such relative abundance of North American wheat in the winter was unusual during the 1930's, except in 1935–36, when the Canadian Wheat Board was rapidly disposing of previously accumulated stocks; but it was more common in the 1920's, when the United States was a large exporter.

The selling policy of the Argentine Grain Board was more reserved than could be expected, although in January we had considered the possibility of such a policy, referring to previous experiences in 1933–34 and in 1935–36. A somewhat delayed and moderate seasonal spurt of shipments began in January, but after six weeks a slump unusual for the season occurred and persisted up to mid-March. The somewhat lagging coincidence of this depression of Argentine shipments with an unusual bulge of North American shipments, due mainly to outflow from the United States, suggests that the abundance of American wheat on the import market curtailed the demand for Argentine wheat at a price at which the Grain Regulating Board was willing to sell. After mid-March shipments picked up sharply, and they were substantially above average during April and early May. For the entire period of January–April, Argentine exports were the fourth smallest in 17 years. But in the other three years the crops were very small, while this year the crop is the second largest in history.

The situation in Argentina in 1933–34, when the Grain Regulating Board controlled grain exports for the first time, was in some respects similar to that of the current season. Argentine exports in January–April were then small in relation to the crop, though somewhat larger than during the current year—60 million bushels as against about 46 million this year. Heavy stocks of wheat that accumulated in the hands of the board at the end of April 1934, about 90 million bushels, were rapidly disposed of during the following six months, when shipments approached nearly 4 million bushels a week. The flow began in May on news of deterioration of the American crop with accompanying rise of prices from a very low level.

January–April exports from Australia this

year were also relatively small, but in relation to size of crop not so exceptionally small as Argentine exports. Australian shipments followed the usual seasonal pattern (Chart 2, p. 372). Expansion of the Oriental market substantially facilitated exports, and about 60 per cent of the January–April shipments went to ex-European destinations, mainly the Orient. In recent weeks (late March and April), this fraction rose to 75–80 per cent. Thus Australian exports in August–April reached about 72 million bushels, 7 million above our forecast for the crop year, and it is necessary to increase the forecast by a substantial margin. Subsidized exports from the Pacific Northwest of the United States filled part of the expanding demand in the Orient, but Australia obtained the larger share of the trade.

Danubian exports during January–April, though not large in relation to the huge domestic crop, were perhaps the second largest on record in postwar years, exceeded only by January–April exports in 1937—the year when Danubian exports for the season reached 89 million bushels. Receipts of Rumanian wheat in the United Kingdom and some other countries were particularly heavy. But after February, Danubian exports declined greatly and picked up only temporarily in April. There were practically no exports from India during January–April, and very little moved from Russia.

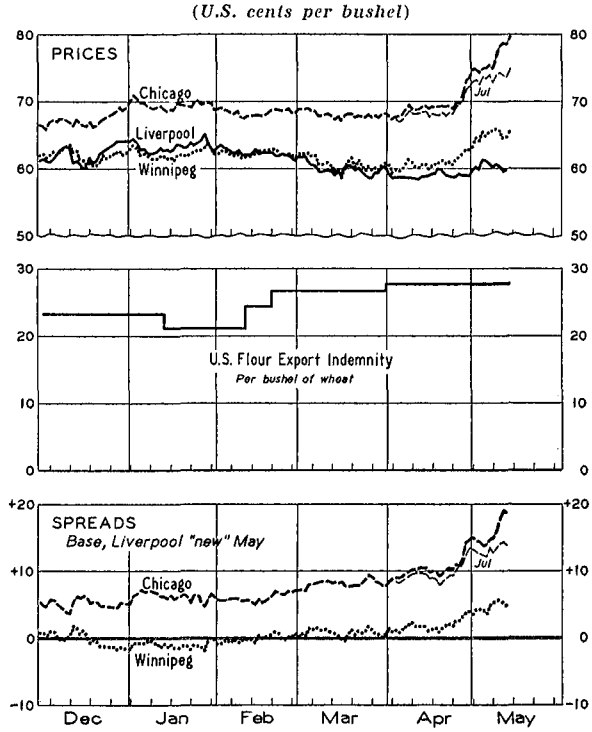
Prices and Spreads

From January until late April, wheat futures prices in the principal markets fluctuated within extraordinarily narrow limits around levels that were influenced substantially by governmental selling programs of three of the major exporters. Late in April, deterioration of the United States winter-wheat crop prompted a moderate price rise, more marked in Chicago than elsewhere. Price developments from late January were in line with expectations expressed in our January "Survey" except as regards Chicago prices, which received more support from advances in export subsidy rates than we anticipated.

January 3–March 4.—Prices at the beginning of January (Chart 3) were at about the highest levels reached during the six months from late October to late April. These levels were reached as a result of deterioration in the outlook for winter wheat in the United States and continuing restraint in the Argentine selling policy—the latter perhaps not unrelated to the former. From these levels prices receded about two cents per bushel in early January. Subsequent changes at Winnipeg and Liverpool until early March, as reflected in Chart 3, consisted principally of a small advance during January 17–27, stimulated by threatening political developments in Europe,[1]

Chart 3.—Wheat Futures Prices and Spreads, and United States Flour Export Indemnity Rates, Daily from December 1938*

(*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. 382), converted at 4.5 bushels per barrel.

The Buenos Aires May future (not shown) held practically unchanged at or slightly above the fixed minimum, equivalent to about 59½ cents per bushel, throughout the period shown.

[1] Collapse of the Loyalist resistance to General Franco in Spain was clearly approaching. Barcelona fell on January 26. The removal of Dr. Hjalmar Schacht from directorship of the German Reichsbank on January 20 deserves recording also, although concern occasioned by this development was not reflected in wheat prices.

and a quick loss of most of these price gains during the last two days of January. The "old style" futures at Liverpool, however, on which delivery of Australian wheat might be expected, weakened substantially during February 6–20, as is noted below.

The May future at Chicago declined slightly relative to the "new" May future at Liverpool during January 9–27. With the subsequent decline at Liverpool, the Chicago May fell to 67½ cents at the close on February 9. To what extent the weakness at Chicago was related to favorable weather for winter wheat in the United States and to what extent to discouragement of holders of futures on other grounds it is impossible to say. Apparently with a view to counteracting this declining tendency, export subsidy rates were increased, those applying on flour sales being first raised on February 7 by 10 cents per barrel on exports from the Pacific Coast only. On February 10 flour export indemnity rates from all ports were raised, and on February 20 rates from eastern ports were further increased (see Chart 3 and tabulation on p. 382). Prices of Chicago futures rose only slightly in response to these increases in subsidy rates, but if the increases forestalled a substantial price decline at Chicago such as we had anticipated, their ultimate effect in supporting prices in the United States may have been substantial.

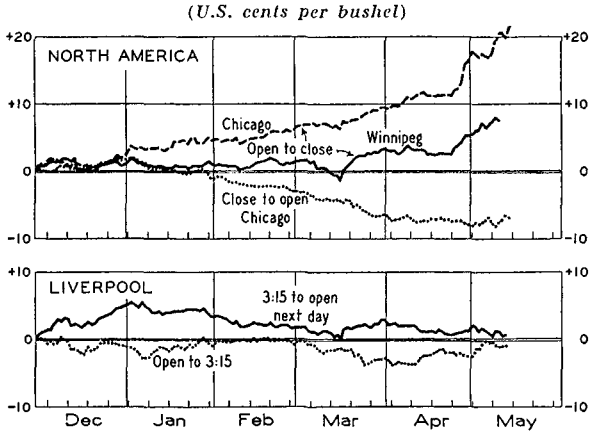
Prices at Buenos Aires from January through mid-May only occasionally rose fractionally above the fixed minimum, equivalent to about 59½ cents per bushel.[1] Even when Liverpool prices were highest, in late January, British c.i.f. quotations on Rosafé were at least 10 cents per bushel below the Argentine minimum price plus shipment costs.

March 4–April 24.—During the first half of March prices at Liverpool and Winnipeg moved downward again, and up to April 24 fluctuated around levels 2 or 3 cents per bushel lower than during February. The decline was apparently associated at first with pressure of Australian wheat afloat and heavy deliveries on March contracts.[2] During March 8–16 Winnipeg showed independent weakness which was partially reflected at Liverpool (Chart 4). Offering prices on Argentine wheat were lowered, but apparently only in response to the lowered prices on other wheats. A formal reduction of about 3 cents per bushel in ocean freights from Argentina announced on March 16 was partially in effect earlier and may have contributed to the price decline at Liverpool.[3]

The broadly horizontal movement of prices at Liverpool and Winnipeg until April 24 was marked by fairly substantial temporary increases immediately following March 16 and

CHART 4.—CUMULATED-INTERVAL PRICE CHANGES, CHICAGO, WINNIPEG, AND LIVERPOOL, FROM DECEMBER 1938*

(*U.S. cents per bushel*)



* Progressive summations of price changes over designated daily intervals, from December 1. A decline of 5 cents during one month in the curve designated "Open to close, Chicago," for example, indicates that the sum of the net price changes between the opening and the close of the market on all trading days of the month shows that price decreases during trading sessions aggregated 5 cents more than increases during trading sessions. The total price change during the month is this sum plus (or minus) the sum of the daily changes between the closing price and the opening price next morning, represented by the change in level of the line designated "Close to open, Chicago."

[1] The Buenos Aires price curve, which would be practically a straight line, is omitted from Chart 3 to avoid confusion when it was in the same range as the Winnipeg and Liverpool curves.

[2] By the end of March, tenders on futures contracts had reached a total of 1,944,000 bushels. Of this, about two-thirds was Argentine wheat tendered on "new" March contracts, and the remainder Australian, tendered on "old" contracts.

[3] Broomhall's *Corn Trade News*, Mar. 22, 1939, said: "The low prices touched this past week were not altogether unconnected with the weakness of Plate grain freights. Following evidence of widespread infringement and evasion of the schedule basis of freight, the Tramp Administrative Committee decided last week to reduce the Plate minimum basis by 5/– per ton" (from 25*s.* per ton). Shortly afterward the quoted rates were 2*s.* 6*d.* per ton above the new minimum.

again near the end of the month. Contemporary market comments attributed both of these price advances to increased political tension in Europe.[1] Some circumstances, however, encourage the inference that the price advance of March 17 and 18 may have been associated principally with evidence that the Canadian Wheat Board would at least help to prevent declines of the Winnipeg May future below 60 cents per bushel (Canadian currency). The subsequent course of the Winnipeg price, repeatedly declining to just under 60 cents per bushel and then recovering, lends color to this view.[2] If the Wheat Board has in fact curtailed its selling or otherwise tended to support the market whenever the Winnipeg May future fell to about 60 cents per bushel, its policy must have contributed significantly to check further tendencies to price decline at Liverpool also.

Tangible grounds for questioning the generally accepted explanation of the price advances of March 17 and 18 appear on study of the origin of the advance. The price recovery, occurring principally on March 17, was led by Winnipeg (Chart 4), which had not previously shown a disposition to take the lead in interpreting European political news. Liverpool futures on March 17 opened below their previous close, and fifteen minutes before the opening of North American markets (3:15 P.M. at Liverpool) were quoted at or slightly below their opening prices. Chicago and Winnipeg prices at their opening in turn were slightly below previous closing prices. But during the first fifteen minutes of trading, prices of the nearer futures at Winnipeg advanced ¾ cent and the October future advanced 1 cent. Liverpool did not respond significantly to this advance at Winnipeg until 20–30 minutes later. The price behavior was such as might find logical explanation either in sudden heavy buying by a large operator on the Winnipeg market or by evidence of a change in the selling program of the Canadian Wheat Board.

It is perhaps significant that Winnipeg had been independently weak during March 11–16 and that on March 14 the May future had fallen below 60 cents per bushel (Canadian currency) for the first time during the current season. Some traders at least had come to count on action by the Wheat Board to prevent a price decline below 60 cents per bushel, and a decline below that level tended to unsettle confidence. On March 15 Winnipeg responded but little to a slight price recovery at Liverpool, and on March 16 the price of the May future fell below 59 cents. A sudden reversal in price sentiment at Winnipeg in these circumstances naturally suggests that the Wheat Board may in fact have taken some significant action to support prices. The extent of the change in market action at Winnipeg appears clearly in the sharp reversal of direction of the solid curve in the upper section of Chart 4, reflecting price changes from opening to close on successive days at Winnipeg.

At Chicago, prices during the first half of March declined less than prices in foreign markets, supported perhaps by a belief among traders that governmental action would be taken to prevent substantial further price decline. From about mid-March the FSCC stepped up sharply the rate at which it was effecting export sales under subsidy.[3]

[1] Chancellor Hitler entered Prague on March 15, and during the next few days his armies moved eastward. On March 17 British press dispatches reported the beginning of an effort to obtain international agreements for resistance to attempts of Germany to seize additional territory. Madrid fell on March 28, and British efforts to come to agreements with other countries resulted in announcement on March 30 of a significant guarantee of Poland.

[2] Winnipeg prices in terms of United States currency, as shown in Chart 3, are about ⅜ cent lower than the Winnipeg quotations in Canadian currency.

[3] Publication of information on export sales became infrequent after the British sale was negotiated in early December, but the substantial sales made in the last half of March were promptly reported. The available data show total sales under the subsidy program plus actual exports from July 1 on unsubsidized sales as indicated in the first column below, in million bushels:

Date	Sales	No. of weeks between reports	Sales made between reports	
			Total	Per week
Dec. 10	71.4	..	...	...
Jan. 15	78.4	5	7.0	1.40
Feb. 20	86.9	5	8.5	1.70
Mar. 18	91.6	4	4.7	1.18
April 1	101.3	2	9.7	4.85
Apr. 30	109.3	4	8.0	2.00

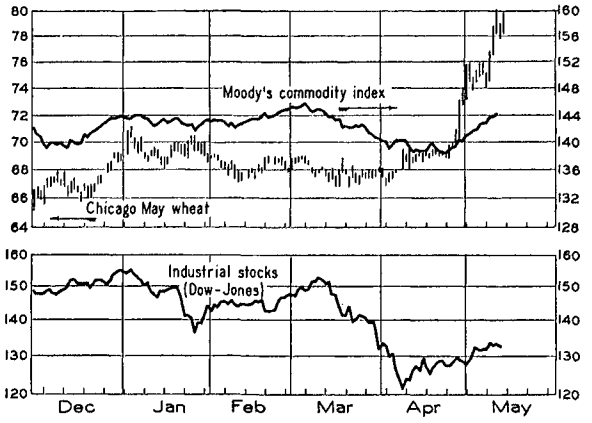
From these data we have computed the average sales per week between the dates shown.

On March 30 and 31 further increases were made in flour export indemnity rates (Chart 3, p. 376).

The resistance of Chicago wheat prices to weakening tendencies abroad during March and early April assumes added significance in view of improvement in winter-wheat crop prospects and the general declines in prices of both sensitive commodities and of industrial stocks during this period. The Dow-Jones index of industrial stocks prices declined 20 per cent during March 10–April 8 (Chart 5).

CHART 5.—CHICAGO MAY WHEAT PRICES AND INDEX NUMBERS OF PRICES OF SENSITIVE COMMODITIES AND STOCKS, DAILY FROM DECEMBER 1938*

(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.

Practically throughout the period January–April, in fact, the relations usually observable between movements of wheat prices and of other sensitive commodity and stocks prices were almost wholly absent. Whether or not this divergence resulted from diverse effects of the tension in the international political situation we are unable to say.

A mild price advance at Chicago in early April that appears noteworthy among the minute fluctuations shown in Chart 3 was confined mainly to cash wheats and the near future. The September future changed only negligibly during this period.

April 24 to mid-May.—Reports of deterioration of winter wheat in the western Great Plains of the United States induced a sharp advance of 4–6 cents in prices of futures at Chicago and Winnipeg between April 24 and May 2. Indications of a squeeze in the Chicago May future were a factor in its price advance and may have contributed some strength to other futures. The price advance to May 2 was larger than appears warranted by the actual crop damage reported, and doubtless reflected anticipation of further crop damage, and some buying by traders who had considered previous prices unduly low but had awaited the beginning of an upward movement before purchasing.

Reports of crop deterioration in the United States continued through the first half of May and were supplemented by unfavorable reports from the spring-wheat regions of the United States and Canada; but in North American markets these reports served principally to offset a tendency toward reaction from the price advances to May 2.[1] Liverpool was slow to respond to the price advance in North American markets and by mid-May Liverpool prices had reacted nearly to their levels of late April.

British wheat price relations.—During January, arrivals of wheat in the United Kingdom averaged about 1 million bushels per week less than the normal consumption of imported wheat, port stocks declined rapidly, and the price of the "new" March future advanced to within ½ cent per bushel of the price of the "new" May (Chart 6, p. 380). From early February, however, receipts of imported wheat were heavy, influenced largely by shipments from the United States under previous agreement with British millers, and port stocks began to increase more rapidly than they had declined. With this accumulation of stocks the March future declined to about 2 cents per bushel under the May and the July went to an equal premium over the May. Heavy deliveries on futures contracts during March (p. 377) were well absorbed, however, and on the final day of the month the expiring futures strengthened appreciably. Price relations between the

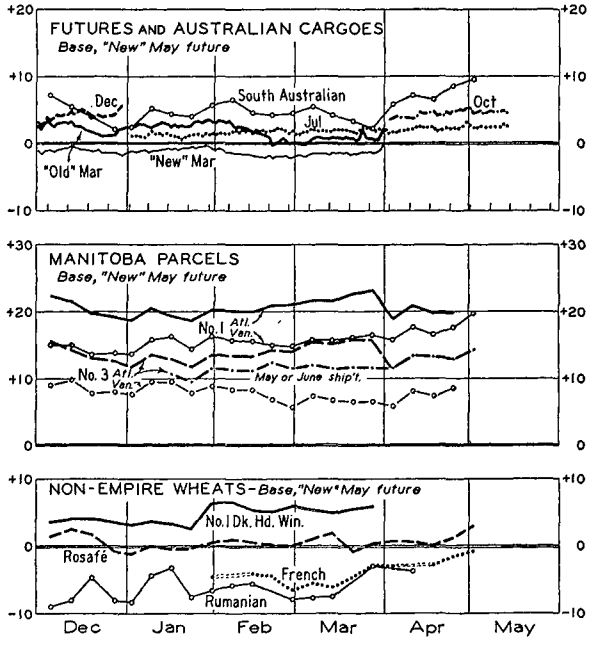
[1] The later advance of the Chicago May future is discussed below under the head of North American price relations.

May, July, and October futures, nevertheless, continued to show "carrying charges" appropriate to the expectation of continuation of heavy stocks in British ports.

Relations among c.i.f. prices of the various types of imported wheat on the British market changed relatively little during January–April.

CHART 6.—BRITISH WHEAT PRICE SPREADS, FROM DECEMBER 1938*

(U.S. cents per bushel)



* Price differences for futures (top section), based on Liverpool daily closing prices. For cash wheats, differences on Tuesdays between the opening price of the Liverpool "new" May 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 U.K.; other wheats, parcels to Liverpool, except Vancouver-shipment Manitobas, Hard Winter, and Rosafé, which are to London. Non-Empire wheats subject in addition to duty equivalent to about 6 cents per bushel prior to January 1.

Prices on Australian wheats were comparatively firm through early February, but weakened slightly thereafter. They were temporarily further depressed at the end of March, apparently owing to pressure of cargoes that had been shipped unsold. In view of the small size of the Australian crop and the heavy demand for Australian wheat in China, it is noteworthy that Australian prices were not held higher.[1] The firmness of Australian quotations in early February caused the "old" March future to sell as much as 4*d.* per cental over the "new" March, within 1*d.* per cental of the maximum possible difference between the two styles of contract,[2] but after February 20 the difference between the two was generally only 1½–2*d.* per cental. Other Australian wheats only rarely carried a premium over South Australian.

Prices of Manitobas for early shipment from Atlantic ports advanced some 4 cents per bushel relative to the Liverpool May future during January–March as British stocks of Canadian wheat were depleted; but quotations on Manitobas for shipment in May or June changed little in relation to the future until about mid-April. Quotations on shipments from Vancouver continued about 4–6 cents per bushel below quotations on Atlantic shipments due to arrive at about the same time.[3]

Rosafé parcels sold at about the price of the May future during January–April, while Rumanian and French wheats were generally 4–8 cents per bushel cheaper until mid-March, when their prices advanced relatively. No. 1 Dark Hard Winter wheat competed actively with Rosafé while it was priced only 3–4 cents per bushel higher; but from late January quotations on No. 1 Dark Hard Winter were 5–6 cents or more over the future until quotations were discontinued at the end of March.

North American price relations.—The prin-

[1] Australia can obtain only slight price advantage in years of short supplies of Australian wheat because millers can readily substitute other wheats for most of their usual quotas of Australian. Since January such substitution has been facilitated by availability of much wheat of similar quality from the United States Pacific Coast. Australian prices probably could not have been held much higher than they were in relation to other wheats: as it was, Australian shipments to Europe during December 1–May 13 were only 33 per cent of the amount in the corresponding period last year. But if Australian wheat had been more firmly held, prices of other wheats might have been somewhat better maintained.

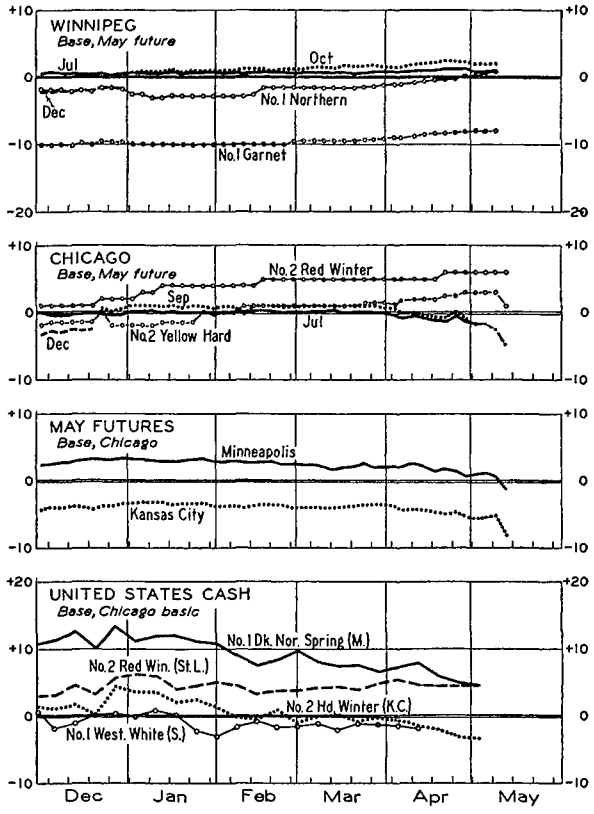
[2] The difference of 5*d.* per cental represents the additional payment to be made by a seller tendering non-Empire wheat on "old" contracts, made while the duty of 5*d.* per cental was still in effect on non-Empire wheats.

[3] British millers have found Canadian wheat from Vancouver definitely inferior to Canadian Atlantic in milling quality. See H. Horace Ward, "The Season's Wheat," *Milling*, Apr. 29, 1939, pp. 491–94.

cipal changes in wheat price relations in North America were associated with strengthening in cash prices at Chicago relative to the May future from early January to mid-February, and tightness in the Chicago May future during April and May. Basic cash wheat at Chicago (minimum-quality No. 2 Yellow Hard Winter) went during January to mid-February from a discount of 2 cents per bushel to a premium of 1 cent, as shown in the second tier of Chart 7. At Minneapolis and Kansas City

CHART 7.—NORTH AMERICAN WHEAT PRICE SPREADS, FROM DECEMBER 1938*

(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.

cash wheat quotations in early January showed premiums over the May futures, after allowing for superiority of quality over the basis, and these premiums did not increase.

Cash prices in Minneapolis, Kansas City, and St. Louis declined relative to Chicago basic cash from early January to mid-February (Chart 7, bottom tier). These relative declines reflect primarily maintenance of little-changed relations to the Chicago May future while basic cash wheat at Chicago advanced relative to the future. At Minneapolis there was some slight weakening in protein premiums.

At Seattle the price of No. 1 Western White was temporarily relatively weak in late January. Its decline and subsequent advance roughly coincided with changes in flour export indemnity rates from the Pacific Coast.

In April the relative firmness of cash prices at Chicago resulted in an advance of the May future to as much as 1 cent over the July, while the price of basic cash wheat went to 3 cents over the May future. A contributing factor may have been absence of a normal degree of pressure to sell cash wheat to avoid transferring hedges in the face of unfavorable relations among the futures. Close to 60 million bushels of the wheat in storage off farms was held under government loans[1] and much other wheat in elevators was apparently not hedged.[2] The principal factor, however, seems to have been a tight situation in the May future created by existence of contracts which made much of the contract wheat in store in Chicago unavailable for delivery on the May future. The opinion was widely held in the trade that the firm contracting to take the wheat had entered into these unusual contracts[3] with a view to creating a squeeze in May wheat.

[1] As of March 8 the amount of wheat under loan was reported as 81,815,427 bushels, of which 23,184,376 was stored on farms and 58,631,051 in public elevators. The total volume on which loans were made has recently been officially stated as 85 million bushels—substantially in excess of the totals carried in our January "Survey."

[2] This inference is indicated by the smallness of the volume of open futures contracts in relation to total commercial stocks. Chicago open contracts and total stocks other than on farms on April first in each of the last three years compare as follows, in million bushels.

	1937	1938	1939
Stocks	139.7	207.8	257.8
Open contracts	111.0	85.8	78.4
Difference	28.7	122.0	179.4

[3] The practice represented by these contracts was described as "unusual and irregular" in a Notice to Members issued by the Chicago Board of Trade on May 10. See *Daily Trade Bulletin*, May 10, 1939.

An advance of the Chicago May future to nearly 5 cents over the July by May 11 (reflected in Chart 7 as a relative decline of the other futures) was accompanied by a decline in premiums of cash wheat over the May future. The relative strength of the Chicago May future from early April was not reflected in the Minneapolis and Kansas City futures, with the result that the third tier of Chart 7 shows relative declines in prices in those markets. Similarly, prices of cash wheats in other markets (bottom tier of Chart 7) declined relative to Chicago basic cash as a result of the tight cash position in Chicago.

United States export subsidies.—Changes in what are technically known as "indemnity payments" on export sales of flour from the United States, referred to in previous pages, are shown in detail in the following tabulation for the period from December 2, 1938,[1] in dollars per barrel:[2]

Date	From Pacific Coast ports			From other ports
	China and Hong Kong	Philippines	General	
Dec. 2.....	1.05	.80	.95	1.05
21.....	...[a]	.90	...[a]	...[a]
Jan. 13.....	.95	.80	.85	.95
17.....	.85	.70	.75	...[a]
Feb. 7.....	.95	.80	.85	...[a]
10.....	1.05	.90	.95	1.10
20.....	...[a]	...[a]	...[a]	1.20
Mar. 3.....	1.15	...[a]	...[a]	...[a]
30.....	...[a]	...[a]	1.10	...[a]
31.....	1.25	1.00	1.20	1.25

[a] Unchanged. So far as we are aware, no changes have been made since March 31.

No consistent series are available on the amounts of subsidy involved in export sales of wheat from the United States. The subsidies appear to have varied somewhat according to grade and quality, port of shipment, and country of destination. An effort has apparently been made, however, to keep the indemnities on flour export sales generally in line with—but apparently slightly below—the subsidies afforded on export sales of wheat. The flour export indemnity rates converted into terms of wheat at 4.5 bushels per barrel appear to give useful indexes of the level and course of weighted averages of subsidy rates on exports of wheat.[3] The actual amount of subsidy involved in the wheat exports to the United Kingdom and Eire, however, may have been appreciably higher than might be inferred from the flour indemnity rates to other points. From late March the subsidies in effect on sales of wheat from the Pacific Coast seem to have been considerably in excess of the equivalents of the flour export indemnity rates. Premiums were being offered to draw out wheat held under government loan in order to avoid an inconveniently large carryover of wheat in the Pacific Northwest at the end of the crop year.

Outlook for Trade

Continued accumulation of security stocks in Europe and increased demand for wheat from the Orient in recent months have somewhat altered the outlook for the volume of trade during the crop year. European takings of wheat during August–April were some 20 to 30 million bushels larger this year than last. Shipments to ex-Europe through April exceeded last year's by some 30 million bushels, and total world net exports of wheat through April exceeded last year's by about 40 million bushels. In our January forecast of European net imports, a slight increase to 420 million bushels seems appropriate. A more substantial increase in the prospective volume of trade with ex-Europe is warranted, for the February–April movement was substantially the largest in the last five years, and this relationship promises to persist at least to the end

[1] For those in effect earlier, see Wheat Studies, January 1939, XV, 279.

[2] Data from the Federal Surplus Commodities Corporation. Rates apply from 2 P.M. Eastern Standard Time on the dates shown. From Dec. 2, 1938 no indemnity payments were available on sales for export to the United Kingdom or Eire.

[3] For two principal series the equivalents are as follows:

Origin and destination	Date of change in flour export indemnity and equivalent in cents per bushel							
	Dec. 2	Jan. 13	Jan. 17	Feb. 7	Feb. 10	Feb. 20	Mar. 8	Mar. 31
Pacific Coast to China and Hong Kong.....	23.3	21.1	18.9	21.1	23.3	23.3	25.6	27.8
East of Rocky Mts. to all points except U.K. and Eire.....	23.3	21.1	21.1	21.1	24.4	26.7	26.7	27.8

of the crop year. Consequently we raise our estimate of ex-European net imports, calculated at 130 million bushels in January, to 145 million—26 million above actual imports in 1937–38. With allowance for discrepancies between imports and exports, world net exports in 1938–39 may now be estimated at 585 million bushels, 25 million larger than seemed in prospect four months ago. In terms of Broomhall's shipments, which usually run lower than net exports, our present forecasts of trade imply probable total shipments of around 570 million bushels, of which 435 may go to Europe and 135 to ex-Europe.

The present forecast of crop-year shipments to Europe implies shipments of 110 million bushels in May–July. This would be slightly above 25 per cent of the season's total and nearly four-fifths as large as shipments to Europe during January–April. Such ratios of May–July to January–April shipments and to the annual total would be moderately above average, but are in line with the seasonal distribution of shipments in years of similar general characteristics.[1]

Distribution of imports. — Our slight upward revision of probable European takings rests upon the reported volume of net imports into the British Isles during August–March. In our January forecast of British imports we had assumed that government reserves would be increased by some 10 million bushels, while privately-owned stocks might continue to stand at a low level. But the recent volume of imports, coupled with persisting discussion of various methods of accumulating stocks of wheat and flour within the country,[2] suggested that efforts to build up security stocks have been stronger than we anticipated. Even if British imports during the rest of the crop year are limited about to current requirements for consumption, while stocks are held at or only slightly above the level to which they were built up on April 1, total imports will be larger than we assumed in January by at least 5 million bushels. In the present political situation it seems improbable that security stocks in the United Kingdom will be reduced, whereas further increase is possible. Our present estimate of British imports rests on the assumption that stocks already accumulated will be held at about the present level.

There is little reason to suppose that Continental Europe as a whole will take more wheat than we estimated in January, but the distribution of imports now seems likely to differ slightly from our earlier expectations. Pertinent data on annual net imports are summarized below, in million bushels, with comparisons:

Country	1935–36	1936–37	1937–38	1938–39 forecast	
				Jan.	May
British Isles	220	212	208	220	225
Germany, Austria, Czecho-Slovakia[a]	9	42	47	40	46
Italy	5	57	4	16	12
France	8	12	16	0	1
Belgium, Netherlands	61	61	61	65	64
Switzerland	17	18	15	16	18
Scandinavia, Baltic					
Poland[a]	21	20	18	20	19
Greece	15	22	18	16	15
Spain, Portugal	..[b]	15[c]	19[c]	22	20
Total Europe[a]	356	459	406	415	420
Brazil	35	39	37	38	39
China	8	1	9	14	23
Manchukuo	14	5	6	8	15
Japan	5	4	..[b]	..[b]	..[b]
West Indies, etc.[d]	13	12	13	13	13
United States	31	17	..[b]	..[b]	..[b]
Other non-Europe	50	52	54	57	55
Total non-Europe[a]	156	130	119	130	145
Grand total	512	589	525	545	565

[a] Without deduction of any net exports.
[b] Net exports.
[c] Including our approximation for Spanish net imports.
[d] Canadian and United States exports to the West Indies and shipments of the United States to her possessions.

It now seems necessary to anticipate net imports of 46 rather than 40 million bushels into Germany and Austria,[3] whose imports

[1] For analysis of 1938–39 shipments in the light of previous experiences, see M. K. Bennett, "Seasonal Aspects of the European Wheat Trade," WHEAT STUDIES, March 1939, XV, 326–29.

[2] This discussion recently led to adoption of a program of governmental subsidization of bakers who undertake to carry flour stocks.

[3] The German protectorates carved from Czecho-Slovakia will be on a net-export basis and their exports to the Sudeten area are included in German imports as foreign trade, at least through March.

during August–March approached 37 million bushels. Germany has further commitments to Argentina and Rumania, but it is not clear how binding these may be. If Germany really takes 15 million bushels from Rumania before the end of the crop year, the quantity frequently mentioned involved in the commitments, her imports (and Rumanian exports) will be larger than we now assume. But the stocks position in Germany is already such that it hardly seems reasonable to expect that she will rapidly absorb Rumanian as well as Argentine wheat.

Since Italian net imports in August–March were small, we lower our estimate of her imports for the year from 16 to 12 million bushels. If Italy failed to build up stocks much during the recent period of political tension, there seems no more reason to do so now. But Italy also has some commitments to purchase wheat from several countries, including Rumania, and the rate of importation may be expected to increase during the remaining months of the year. Small net imports into France are now probable because disposition of the domestic wheat surplus has proceeded so slowly. Through March, France was barely on a net-export basis. Exports will probably slacken in the next few months, while imports from the North African colonies, where the new crops promise well, will probably begin to show their usual seasonal increase in June or July.

Other changes in the outlook for imports by particular European countries are slight. The Belgian crop has been revised upward, and her small takings in August–March suggest that imports for the crop year will be slightly smaller than we anticipated, even though stocks are being somewhat enlarged. On the other hand, the Netherlands, Switzerland, and Norway seem to have been accumulating slightly larger stocks than we expected, and their prospective imports are therefore increased by small amounts. Since Greek imports in August–March were 2 to 3 million bushels smaller this year than last, reflecting a crop 6 million larger, we lower our estimate of imports in 1938–39 to 15 million bushels. This total is 3 million bushels below the net imports of 1937–38.

We also lower from 22 to 20 million bushels our guess at Spanish and Portuguese crop-year net imports; these in August–March seem to have been somewhat below last year's. News that the Spanish government has recently enlarged its credit with the Argentine government, to cover purchase of wheat up to 15 million bushels, suggests that Spanish imports will be heavy during the few remaining months of the crop year; but we assume that the quantities taken will be somewhat smaller than those coverable by the credits. Spain will soon be harvesting a new crop.

All of these minor changes, largely offsetting, leave our estimate of prospective imports of Continental Europe unchanged at 195 million bushels. But larger prospective takings by the British Isles slightly increase the probable crop-year trade of Europe as a whole.

Our present forecast of non-European imports, 145 million bushels, is 15 million bushels larger than our January figure and 26 million above estimated imports last year. Forecasts of ex-European trade by other organizations were also raised during February–March about in the same proportion, and in mid-May Broomhall revised his February forecast from 132 to 144 million bushels. This forecast is 40 per cent above reported shipments to ex-Europe in 1937–38. Our conjecture is that the percentage increase in ex-European trade may be somewhat smaller than this. We count upon an increase of ex-European takings of about 20 per cent as measured by incompletely reported net imports, and of about 30 per cent as measured by Broomhall's shipments to ex-Europe.

Practically all the increase of non-European trade between 1937–38 and 1938–39 is assigned in our estimate to China and Manchukuo. The higher shipments reported to these destinations thus far in 1938–39 are the principal basis for anticipating increase, and no forecast can be more than a rough approximation. We also raise slightly our forecast of Brazilian imports. On the basis of present information, very little change can be justified in forecasts for other countries. But a minor reduction of prospective imports into these other countries, only 2 million bushels, seems warranted, because in January it was reason-

able to suppose that British India might be on a net-import basis to that amount, whereas this now seems improbable.

Sources of exports.—The prospective distribution by sources of probable crop-year net exports of 585 million bushels is summarized, with comparisons, in the tabulation below. In the main, the substantial changes since January reflect the unexpected expansion of Oriental markets, together with unforeseen developments in the policies of the various governmental agencies that influence exports from most exporting countries.

Country	6-year average[a]	1936–37	1937–38	Forecasts 1938–39	
				Jan.	May
United States	30[b]	...[c]	118	80	105
Canada	193	195	87	145	145
Australia	112	102	126	65	90
Argentina	128	162	72	135	105
Lower Danube	39	89	54	70	73
USSR	22	5	43	37	37
Others	45	56	53	28	30
Total	569	609	553	560	585

[a] 1932–33 to 1937–38.
[b] Without deduction of net imports in 1936–37.
[c] Net imports.

In September and even in January we were inclined to doubt that Secretary Wallace, in view of the situation on the world wheat market, would push to full completion the original plan to ensure exports of 100 million bushels of American wheat during the crop year, with subsidy to the extent necessary. In years of heavy supplies and low wheat prices, holding tendencies usually develop most strongly in the United States. April 1 stocks of wheat on farms of 189 million bushels—the largest on record in postwar years—indicate that American producers were in fact inclined to hold wheat as usual this year; the large quantity stored is not mainly a result of the government loan program, for only 23 million bushels out of 82 million under government loan were held on farms. Purely speculative holdings were no doubt discouraged by uncertainty regarding governmental policies; yet the great bulk of the heavy April 1 stocks of wheat other than on farms was held by private interests, not the government. Export sales under subsidy were speeded up in February, and by May 1 were large enough to bring commercial exports plus subsidized sales (partly unshipped as yet) 9 million bushels beyond the goal of 100 million bushels set for the July–June year.[1]

We therefore assume that total United States exports of wheat and flour in July–June will reach 110 million bushels. But they seem unlikely to exceed this figure appreciably, since exports lag behind sales and sales of flour under the indemnity program may be small during May–June. Precisely how far the goal of 100 million bushels will be exceeded will depend upon changing relationships between American and foreign prices and upon the indemnity policy. Rates of indemnity were not raised when American prices rose on news of crop deterioration. Export sales of flour were thus hampered, those from the Pacific Coast to China declining sharply in the second week of May. These recent developments suggest that indemnity rates perhaps will not be increased before the crop year ends.

With July–June net exports of 110 million bushels, those of August–July may not exceed 105 million, for it seems improbable that exports next July will be as large as in July 1938, when they approached 13 million bushels. With a much smaller crop in prospect, and possibly strong competition from Argentine old-crop wheat that will be carried into the next crop year (p. 387) in unprecedented amount, July exports from the United States seem likely to be only moderate. But much will depend upon governmental policy in disposing of such wheat as may be received under the loan program, and upon the export program for the next crop year.

No change seems necessary in our forecast of Canadian net exports, at least on the assumption that the Canadian Wheat Board will continue a policy of selling freely but without pressure. The enlarged share of the world wheat trade secured by North America during the winter, in reflection of the unexpectedly reserved selling policy of the Argen-

[1] We infer that the execution of the plan was deemed necessary to bring pressure on other exporting countries with a view to securing their adherence to an international wheat agreement.

tine Grain Regulating Board, was absorbed wholly by the subsidized exports from the United States. Canadian exports in these months were less than their seasonal pattern would require. Hence it seems probable that Canadian crop-year exports will not exceed our January forecast of 145 million bushels, unless the Wheat Board follows a more aggressive sales policy. Canadian wheat must compete on European markets with Argentine wheat, of which the baking quality has been favorably appraised this year by millers; and the flow of Argentine wheat to Europe has increased substantially since mid-March.

The largest upward revision is necessary in the forecast of Australian exports. Through April, these had already exceeded our January forecast for the crop year. The Oriental market may remain open up to the end of the current crop year, for Chinese purchases of Australian wheat are reported for shipment in July, indicating that substantial exports may continue after harvest of the Chinese crop. Hence we raise our estimate of Australian net exports in August–July 1938–39 from 65 to 90 million bushels.

Our January forecast of Argentine exports, on the other hand, appears too high. Under the reserved selling policy of the Grain Regulating Board, Argentina's share of world exports during the winter months was disproportionately small in relation to her crop. But the situation during the rest of the crop year appears to be more favorable for Argentine exports. With the American program of subsidized sales for export about complete, with Australia now shipping from 75 to 80 per cent of her exports to ex-Europe, the European market is more open to Argentine wheat than before. Yet the preceding analysis has shown that this market will be relatively narrow during the rest of the crop year, and Argentine wheat must compete there with Canadian wheat and wheat from the Danube basin, where abnormally large supplies are still available. We doubt if Argentine exports can continue at the high level of April. This would seem to involve a much more aggressive selling policy in Argentina than seems probable in the light of experience. It can hardly be expected that Argentina will this year obtain as large a share of world shipments in May–July as in these months of 1932–35, when American and Danubian exports were both small. Thus it seems probable that Argentine shipments may follow their usual pattern in the remaining months of the crop year, declining somewhat from their high level in April. August–July net exports may not exceed 105 million bushels. Our January forecast was 135 million.

Danubian exports in January–April, almost the largest on record, brought August–April net exports to about 64 million bushels. On the basis of our January forecast, this would leave only 6 million for May–July exports. This quantity is probably too small in view of Danubian shipments in recent weeks and of existing barter arrangements between Rumania and various countries. We are inclined to raise our forecast of Danubian exports to at least 73 million bushels. The figure may prove larger if the agreements with Germany and Italy are executed in full; there is also a recent announcement of British purchase of some 5 million bushels.

Net exports from the USSR still seem likely to approximate 37 million bushels, although Russian shipments through April were as much as 36 million. This year, as last, Soviet Russia is importing a substantial quantity of wheat at Vladivostok, so that net exports will be slightly smaller than shipments or gross exports. It seems improbable that the present year will witness a repetition of the heavy June–July exports of 1938, for those exports were basically due to clogged port elevators that had to be cleared of remnants of the huge crop of 1937, and the smaller crop of 1938 is unlikely to have created a situation necessitating clearance of elevators for the 1939 crop.

Exports of other countries may be about 2 million bushels larger than we earlier expected, mainly because exports from Japan and some European countries have been larger than we anticipated.

Outlook for Carryovers

The present outlook for the world wheat carryover from the 1938 crop, about 1,145 million bushels, remains practically the same

as it was in January. Larger estimates of the 1938 crop are offset by prospect for somewhat larger disappearance, partly within the world ex-Russia ex-China and partly through larger exports to the Orient. The distribution of the carryover now appears significantly different, with stocks presumably somewhat less concentrated in exporting countries and more concentrated in importing countries of Europe. This results from our expectations of larger exports, itself due partly to evidence of a tendency toward greater accumulation of stocks in Europe.

An increase in world carryover from 600 million bushels to 1,145 million within a single year is unprecedented; but even this increase will not raise the total to the record peak of over 1,200 million bushels in 1934. Our appraisal of the probable distribution of world carryover as of about August 1, 1939 is given in million bushels in the following tabulation, with comparisons.

Position	Estimates			Forecasts 1939	
	1931–34 average	1934	1938	Jan.	May
United States[a]	335	274	154	300	275
Canada	167	193	23	130	130
Australia	62	85	50	75	55
Argentina	85	118	65	145	175
Total	649	670	292	650	635
Europe ex-Danube	260	379	190	300	320
Danube basin	47	54	24	75	75
French N. Africa	8	6	5	7	10
Total	315	439	219	382	405
India	45	29	29	48	50
Others[b]	75	65	61	55	55
Grand total	1,084	1,203	601	1,135	1,145

[a] As of July 1.

[b] Stocks afloat to Europe and to ex-Europe; United States wheat in Canada and Canadian wheat in the United States; and stocks in Egypt and Japan.

Carryovers in the four chief exporting countries now seem likely to amount to 635 million bushels, 15 million below our January estimate but more than twice as large as in 1938. They may be about 35 million bushels smaller than in 1934 and some 15 million below the average for 1931–34. The record stocks of the chief exporters in 1933 were some 90 million bushels larger than our forecast for 1939. The aggregate carryover of the chief exporting countries thus promises to be only the third largest in the postwar period.

Among the exporting countries, only Argentina will hold stocks on August 1 that will probably be by far the largest on record, exceeding the previous record in 1929 by perhaps 40 to 50 million bushels. Since the record crop of 1928 was about 30 million bushels larger than the 1938 crop, it is clear that disposition of the latest Argentine crop has proceeded at a much slower rate, and that the problem of disposition in the next seven months is extremely serious.

The Australian carryover, on the other hand, may be scarcely larger this year than last—the result partly of a smaller crop, and partly of an advantageous position in relation to expanded markets in the Orient. But it may also be regarded as a significant reflection of marketing policy, for at present Australia is the only large exporter without direct governmental intervention in the export business.

The prospective carryovers of the two North American exporters, though large, are by no means of record size. The United States carried larger stocks from 1930 to 1933, and in the last two of these years stocks exceeded the carryover expected in 1939 by about 100 million bushels. Canada had large carryovers from 1929 until 1936, and in 1933 her carryover exceeded that expected for 1939 by about 80 million bushels. This reflects in part the fact that the 1938 crops in both countries were not of record size—particularly the Canadian, which even fell substantially below the average for 1928–32. But it also suggests that both countries do not desire to repeat their earlier experiences. During the current year, Canada has perhaps sold more freely than in any postwar surplus year except 1935–36. And the United States, in order to hold down her carryover,[1] has chosen to follow a policy of export subsidization, which Secre-

[1] Of the prospective United States carryover of 275 million bushels, some will be held by governmental agencies. But the quantity so held will be less than the 82 million bushels under loan on March 8, because the agencies have made concessions to borrowers to induce retirement of loans, and because farmers redeemed loans on the price advance from late April.

tary Wallace opposed for several years and which is inconsistent with the liberal trade-agreement policy pursued by Secretary Hull.

August 1 stocks in Europe, both in the importing section and in the normal surplus area, are likely to be high. Danubian stocks may be no larger than in 1929, although the 1938 crop is estimated nearly 100 million bushels larger than the crop of 1928. There are indications, however, that this year's crop may be overstated in some countries, a probability which we take account of by assigning to these countries a large "statistical" disappearance of wheat rather than an inflated carryover. The same prospective carryover this year as in 1929 reflects the fact that the Danubian countries, with their network of barter agreements, are now in a better position to dispose of export surpluses than they were a decade ago. This must be taken into consideration in appraising the possibilities for disposition of overseas wheat in the European markets.

Stocks on August 1, 1939 in Europe ex-Danube now seem likely to be about 20 million bushels larger than we expected four months ago. The change comes mainly from alteration of the stocks outlook in the United Kingdom and in Germany. The year-end carryover in France will also be heavy, but not much larger than we anticipated in January because the increase in the crop estimate was largely offset by heavier utilization of wheat for reseeding.

Although total year-end stocks in Europe ex-Danube will be large, they are not likely to be of record size, and may prove some 60 million bushels smaller than in 1934 and 30 million smaller than in 1935. In those years many countries, including Germany, were attempting to dispose of their surplus even at considerable fiscal sacrifice. At present, however, none of the major importers of wheat in Europe except France is pressing for disposal of wheat surplus at a loss to the national treasury, and even the French efforts have been relaxed in recent months. Other European countries, exemplified by Germany, seek to restrict consumption of wheat and are adding considerable amounts of imported wheat to domestic surpluses.

Hitherto, under ordinary conditions, large year-end carryovers in importing countries presaged reduced imports. This year the carryovers will consist largely of security stocks under governmental control, and these can hardly be released in a short time under conditions of political tension that may well continue through the summer, if indeed war does not come earlier. Under such conditions the effect of large European carryovers upon imports during the beginning of the next crop year is more uncertain than usual; but it seems probable that European imports during the early months of the next crop year may not fall as low as would be expected if the carryovers included only ordinary commercial stocks.

Prospects for 1939 Crops

It is too early to form more than a rough opinion of the probable size of the world wheat crop of 1939. Weather conditions during May–June, ordinarily of major importance in determining wheat yields in the Northern Hemisphere, may be even more important than usual this year, since in several important regions the crops are in particularly vulnerable situations. This is true especially of the American Southwest; with a poor start last fall, wheat was poorly rooted there, and consequently is not normally resistant to unfavorable weather conditions, as has been shown by developments since late April. There are similar situations in northwestern Europe, where an unusually large proportion of the fall-sown wheat was damaged by severe cold in December, much had to be reseeded during the winter, and these resowings have not had a good start. Some parts of the winter-wheat area in Soviet Russia, and her important spring-wheat area also, are more than usually dependent this year upon further weather developments. Spring wheat in the United States seems unusually vulnerable over rather wide territories because of deficient subsoil moisture. Under such circumstances, favorable weather may cause substantial improvement of crops, but unfavorable developments may cause disastrous deterioration.

Present information concerning one of two components that determine wheat crops—the acreage—is reasonably definite at least for the Northern Hemisphere. The area sown for the 1939 crop will be substantially smaller than in the last two years of greatly expanded acreage and perhaps slightly smaller than the average for 1932–36. The 1939 wheat acreage in the Northern Hemisphere may now be estimated at some 230 million acres, as against 244 million in 1938 and 232 million on the average in 1932–36. Including Southern Hemisphere countries, the wheat area of the world ex-Russia ex-China for 1939 may be roughly approximated at 268 million acres as against 285 million in 1938 and about 270 million in 1932–36.

The present outlook for yield per acre may of course change greatly with unpredictable weather developments, but it is hardly reasonable to expect this year results as favorable as were obtained last year. Average rather than exceptionally good yields per acre seem in prospect even with moderately favorable weather, while unfavorable weather conditions may result in considerable deterioration. We interpret the available information on crop conditions on May 20 as suggesting that the most probable size of the 1939 world wheat crop is about 3,800 million bushels, as against 4,480 million in 1938 and 3,650 million on the average in 1932–36. This would mean a crop some 700 million bushels or about 15 per cent smaller this year than last, due 6 per cent to reduction in acreage and about 10 per cent to prospective smaller yields per acre. A crop of this size would exceed the three consecutive small crops of 1934–36 and also the average for 1932–36, and it would approach the crop of 1933.

With a crop of 3,800 million bushels, total supplies of wheat for 1939–40 (from inward carryover, new crop, and Russian exports) would be some 150 million bushels smaller than the record large world wheat supplies in 1938–39, in spite of the huge inward carryover. But supplies would be substantially larger than in most other years and comparable with those of the surplus period from 1930–31 to 1933–34.

The prospective distribution of world wheat production between regions and countries is even more uncertain than the prospective total. But since our appraisal of the total is based on analysis of the situation in particular countries and regions, we give details in the following tabulation, in million acres and million bushels.

Region	Acreage			Yield per acre		Production		
	1932–36 average	1938	1939 prospective	1927–36 average	1939 prospective	1932–36 average	1938	1939 prospective
United States								
Winter	45.9	56.4	46.2[a]	12.0	11.8	459	687	544[b]
Spring	22.3	23.5	19.5[c]	9.3	9.3	159	244	181
Canada	25.4	25.9	26.0[c]	14.4	14.0	300	350	364
Lower Danube	20.0	22.2	22.6	16.1	17.7	305	464	400
Other Europe	57.6	54.7	55.8	21.0	21.0	1,267	1,374	1,172
French North Africa	9.0	8.5	9.5	8.1	8.5	72	73	81
India	34.2	35.6	33.0[d]	10.4	10.4	351	402	344[d]
Others ex-Europe	17.8	17.2	17.8	14.7	14.7	265[e]	337[e]	264[e]
Northern Hemisphere	232.2	244.0	230.4	14.4	14.5	3,178	3,931	3,350
Argentina	18.0	20.9	18.5	12.5	12.5	232	320	230
Australia	13.5	14.1	13.0	11.4	11.4	164	151	149
Others	5.8	6.2	6.1	13.2	13.2	74	77	81
Southern Hemisphere	37.3	41.2	37.6	12.2	12.2	470	548	460
Total	269.5	285.2	268.0	14.1	14.2	3,648	4,479	3,810

[a] December 20 official estimate of area sown.
[b] Official forecast as of May 1.
[c] Official report on "intentions to plant"; for Canada, plus winter-wheat area for harvest.
[d] Official preliminary estimate.
[e] Crop estimates for several countries of this group in recent years seem not comparable with estimates of earlier years, and change in the basis of estimation may cause 1939 crops to be larger than here anticipated.

Acreage.—Official estimates of the acreage sown to winter wheat are now available for most of the principal wheat-producing countries of the Northern Hemisphere, and it is only for the secondary Northern Hemisphere wheat producers that data in the tabulation have to be based on acreage in previous years. There is no official estimate, however, on the acreage of spring wheat sown in the Northern Hemisphere, seeding of which is barely complete in most countries. Official information is available concerning farmers' intentions to plant in the United States and in Canada. No comparably objective basis exists for approximation of the Southern Hemisphere wheat acreage, and our figures on prospective acreage in Argentina and Australia represent opinion based on analysis of their wheat situation as compared with the outlook for other alternative crops.

Most of the probable reduction of wheat area in the Northern Hemisphere represents reduction in the United States, though India is another important wheat producer whose officially reported wheat acreage (perhaps not yet comprehensive) is substantially below last year's and even below the 1932–36 average. Both importing and exporting European countries, on the other hand, show on the average an increase of acreage of some 2 per cent. But an unusual amount of winterkilling, not yet fully appraised, may bring wheat acreage in the wheat-deficit area of Europe as low as last year's, for it is probable that not all of the winterkilled areas have been reseeded to spring wheat. About half of the suggested increase in acreage in Europe ex-Danube is occasioned, according to our conjecture, by a larger wheat area in Spain.

The estimate of prospective spring-wheat acreage in North America is based, as mentioned above, on "farmers' intentions to plant." In the United States, actual seeding seems rather closely to approximate these expressed intentions. As for Canada, private appraisals of intentions to plant point toward a slight decline of wheat acreage, whereas the official estimate points to a slight increase.[1] Both official and private reports agree, however, that the durum wheat area will be reduced. Comments were also made that the official report, issued on May 9 and based on conditions as of May 1, did not take account of lack of moisture and of heavy dust storms which later developed and may have tended to restrain plantings. Yet at present wheat sowings in Canada cannot be expected to differ much from last year's, and the principal factor in reduction of wheat acreage in the Northern Hemisphere remains the substantial reduction of sowing, both of winter and of spring wheat, in the United States. This reduction, however, brings the sown area in the United States little below the 1932–36 average, and mainly represents reduction from the much larger areas of 1937 and 1938.

The prospective 1939 wheat acreage in Argentina and Australia now seems somewhat larger than we anticipated last January. The arguments then expressed, pointing toward substantial reduction of wheat area in the Southern Hemisphere, continue to have general validity; and recent reports confirm the probability that Australian farmers will not sow as much as last year, and that in Argentina some wheat growers favor other grains and linseed. But the Australian crop has been more readily disposed of than we expected, and Argentine producers have given evidence of satisfaction with the fixed price of wheat, as is indicated by the rapidity of their marketing. Hence the stimulus to restriction of the wheat acreage appears to us less strong than we appraised it in January. Moreover, soil and weather conditions in both countries appear moderately favorable for sowings this year. It is recently reported that the Argentine government has authorized loans totaling 6 million pesos to encourage transferring wheat land to pasture; but there is little information to suggest how this scheme may work, and it probably will begin too late to have much effect on sowing now in progress. Hence we now appraise the prospective wheat acreage in Argentina at 18.5 million acres—about equivalent to the average acreage in 1932–36 if one disregards the exceptionally small area

[1] Maintenance of acreage in Canada appears to have occurred in the face of discussions pointing toward legislation that would reduce the guaranteed minimum price to producers (No. 1 Northern, basis Fort William–Port Arthur) from 80 to 60 cents (later 70 cents).

sown in 1935, due to unfavorable weather conditions. The prospective Australian acreage we place at 13 million acres, somewhat below the average for 1932–36.

Yields.—Appraisal of reasonable prospects for wheat production by regions and countries is as usual largely conjectural in May. Only the Indian crop, now harvested and officially estimated, cannot be appreciably affected by weather developments. The official estimate of 344 million bushels, however, is subject to revision; and the final official estimates in 1938 and several earlier years substantially exceeded estimates current in May. Broomhall has recently expressed the opinion that an upward revision of the Indian crop this year is unlikely.

As of May 1, the United States winter-wheat crop was officially forecast at 544 million bushels as against 549 million bushels as of April 1. Improvement in the outlook occurred between December and mid-April; but in the last week of April dry weather set in and continued until mid-May in the Great Plains from North Dakota to Texas and also in the Pacific Northwest. This is not fully reflected in the official forecast as of May 1, and the official forecast itself pointed out that reports received from Nebraska, Kansas, Oklahoma, Oregon, and Washington (not all states sent reports) had indicated deterioration between May 1 and May 10. Trade opinion confirms this and suggests further worsening of prospects after May 10. Hence the official forecast of the winter-wheat crop as of May 1 presumably overstates the present prospect for the crop.

The American spring-wheat crop may give about the average yield per acre of 9.3 bushels. Shortage of subsoil moisture in the Dakotas perhaps makes the prospect for average yield uncertain in the absence of ample and well-distributed rains, and an unusually heavy infestation of grasshoppers is feared.[1]

The Canadian Prairie Provinces were probably supplied this spring with a reserve of subsoil moisture normal or slightly better, except perhaps in limited areas in southern Manitoba and southeastern Saskatchewan. It would therefore seem reasonable to expect that if average rainfall normally distributed occurs in the coming growing season, an average yield per acre will be harvested in Canada. But recent reports point toward lack of moisture, and heavy dust storms have perhaps somewhat damaged the newly-sown crop. On the other hand, preparation of the fields was probably better than usual. In our appraisal of the prospective Canadian crop we assume a yield of 14 bushels per acre. Though slightly lower than the average for 1927–36, this may be regarded as a reasonable average in view of the declining trend of yield in the Prairie Provinces.

In many European countries the prospects for wheat crops range from below average to average. Reports on the condition of winter wheat indicate serious damage from winter-killing, particularly in France, Belgium, and the Netherlands, but also in Germany whose crop is officially reported as average, and even in Italy, whose crop this year is characterized as a good one. Much land was reseeded during the winter; some had to be reseeded with spring grain, probably not wholly wheat. Thus the outlook in European importing countries is less favorable this year than last. If we take for individual countries yields suggested by the reported condition of their crops, the yield per acre in present prospect for importing Europe is about 21 bushels. This corresponds to the 10-year average, but in view of the rising trend of yield in western Europe, it may be regarded as slightly below average. The total prospective production of Europe ex-Danube, based on this yield per acre and estimated acreage, approximates 1,170 million bushels as against 1,374 million reported in 1938 and an average of 1,267 million in 1932–36.

In the Danube basin, on the other hand, the condition of the wheat crop is reported as generally good. This seems not to suggest so exceptional a crop as was harvested in 1938, but a moderately good yield as in 1936 and 1937 seems reasonably in prospect. On the

[1] When announcing on May 16 that a marketing quota on wheat would not be proclaimed for 1939–40 and that the national acreage allotment for the 1940 crop would be 62 million acres, Secretary Wallace appraised the prospective 1939 crop at 704 million bushels, 21 million below the figure tabulated above.

probable acreage, such a yield would result in a 1939 crop of about 400 million bushels. With a crop of this size in the Danube basin, the total European wheat crop ex-Russia in 1939 may approximate 1,570 million bushels, some 250 to 300 million less than in 1938 but about equal to the average crop in 1932–36—a period when European wheat production was considerably more expanded than in earlier years.

Outturns in the Southern Hemisphere can at present be appraised only on the assumption of yields per acre equal to the 10-year average, an assumption in accord with the fact that sowings of new crops are apparently proceeding under moderately favorable conditions.

Winter wheat in Soviet Russia is reported to have been seriously affected by winterkilling in some regions, particularly where sowings last fall were unfavorably affected by drought. Spring-wheat sowings were somewhat delayed, and the important spring-wheat area in the Central and Volga regions lacks sufficient subsoil moisture because of last year's drought. Under such conditions, the Russian wheat crop must be regarded as very vulnerable to unfavorable weather developments.

Outlook for Prices[1]

Disregarding war scares, the most important factors in the outlook for world wheat prices during the next two or three months appear to be the developing prospect for a smaller world wheat surplus in 1939–40 than in 1938–39, and continuance of governmental intervention in the wheat markets especially of the United States, Argentina, and Canada. A small advance of Liverpool futures prices during the remainder of the crop year may perhaps be anticipated even if new-crop prospects should be normally favorable or a little better. With severe deterioration of North American spring-wheat crops the advance might be larger, but an increase of more than about 15 cents a bushel probably could not be sustained. If Liverpool prices should rise substantially, present premiums of Chicago futures over Liverpool futures would probably decline. If by August the new Canadian crop should appear to reach or exceed 350 million bushels, Winnipeg futures prices would probably be weaker in relation to Liverpool prices than they have been during the past six months.

Liverpool prices.—For several weeks, in the face of an appreciable advance in North American futures prices, the July and October futures at Liverpool have fluctuated within a narrow range close to 62 and 64 cents respectively. The recent level differs very little from that which prevailed during most of the winter. This low level of price seems to us based on an assumption that burdensome wheat surpluses would probably continue for several years to come. A normal price of contract wheat at Liverpool such as might be expected in a year of ample but not excessive world wheat supplies, with commodity prices about at present levels, is perhaps $.90 to $1.00 per bushel. Crop developments in the next few months such as would result in a world wheat surplus as large as that of the present crop year seem unlikely, given the present position of winter-wheat crops in the Northern Hemisphere. Hence further depression of Liverpool futures prices, so far as it might be based on developing prospects for enlargement of the world wheat surplus, seems improbable.

The level of old-crop exportable stocks is high, particularly in Argentina. It is not clear that maximum pressure on the international market has been witnessed thus far in the present crop year. Accentuated competition for export outlets between the Argentine Grain Regulating Board, the Canadian Wheat Board, and the Rumanian government, might conceivably depress Liverpool prices appreciably below their levels of mid-May. Our impression, however, is that such active price-depressing competition is unlikely to occur before the outlook for North American spring wheat becomes rather definite about in late July. Governmental agencies, though obviously anxious to avoid accumulation of exportable stocks, must also be anxious to avoid further enlargement of the losses to national

[1] This section was written by M. K. Bennett.

treasuries that would be incurred if international prices were further depressed.

The present new-crop outlook, as summarized above, suggests the prospect for a smaller world wheat surplus in 1939–40 than in 1938–39. We interpret the present indications as involving some degree of surplus reduction even if growing conditions of Northern Hemisphere crops prove somewhat more favorable than usual through June–August, because of acreage reduction already achieved in the United States, moderate rather than large winter-wheat crops already nearly assured in India, the United States, and Europe, and strong probabilities of some degree of acreage reduction in Argentina and Australia. In other interseasonal periods of transition from large to less large surplus (since 1933–34), Liverpool prices have tended to make upward adjustments. A similar adjustment seems reasonably in prospect this year.

The extent of price increase at Liverpool would probably depend both upon changing new-crop prospects and upon competition between exporting agencies to dispose of old-crop stocks. Never before have governmental agencies had as much power to prevent impetus to price advance based on crop news in exporting countries from being transmitted to the international market. In view of this situation, and on the assumption that the agencies are anxious to carry as little wheat as possible, our impression is that competition between exporters would prevent a large sustained advance of Liverpool futures prices—say of more than about 15 cents—even if crop reports should become strikingly unfavorable. With approximately normal development of new crops, we venture the guess that a price advance of appreciably more than 5 to 10 cents a bushel at Liverpool in June–August could not be sustained. The reluctant and trifling response of Liverpool futures to substantial advances in North America during late April and early May probably foreshadows price behavior for some weeks to come.

The probable price-enhancing influence of whatever may transpire as international agreements seems unlikely to prove of major significance in the next few months. It is already probably too late for acreage-reduction agreements to have more than a negligible effect on the areas now being sown in Australia and Argentina, and export quotas would presumably apply to the coming crop year.

Chicago-Liverpool relationships.—The July and September futures at Chicago in mid-May stood at a premium of 9–12 cents over the July and October futures at Liverpool. This premium was a few cents larger than had prevailed during most of the winter, prior to the advance of futures prices in North America beginning late in April. In the main, such a premium was possible because of the governmental policies of crop loans and export subsidization, though holding tendencies among farmers and traders presumably had some influence. In coming months, governmental policies may be expected to be the dominant influence affecting the size of the Chicago–Liverpool spread, and accordingly the level of Chicago futures prices. The outlook for Chicago prices therefore involves the outlook for governmental policy.

At present writing it is certain that wheat growers in 1939–40 will have access to soil-conservation payments and parity payments such as were available in 1938–39. Since the Secretary of Agriculture did not proclaim by May 15 the existence of a prospective supply 35 per cent in excess of a normal year's domestic consumption and exports, it is also clear that there will be no marketing quota system in operation in 1939–40. The policy of export subsidization seems well entrenched and likely to continue during 1939–40.

Whether or not loans to producers will be available, and at what level, is as yet uncertain. Recent crop damage and price advance suggest that continuation of the loan system is not assured. Our impression is that government officials would willingly suspend the loan system for a time or, if by June 15 continuation of it seems desirable, will be eager to avoid appreciable increase in the level of loan rates. Lower rates would hardly be possible under the existing law. If present loan rates are continued, Chicago prices in the next three months are not likely to be allowed to fall appreciably below loan rates (or below the February–March level of Chicago futures), because under such circumstances an unwel-

come volume of new-crop wheat might come under loan and make difficult the avoidance of an excessive carryover in government hands at the end of 1939–40.

Accordingly, we take it that Chicago futures will not fall below 65–70 cents in the next few months regardless of crop prospects. With notably unfavorable crop developments, substantial advances are possible, but probably not to an extent that would heavily increase the present premium of Chicago over Liverpool. The administration presumably would not be disposed to support a price advance to levels very far above loan rates. This would tend to make market prices appear remunerative to wheat growers, thus jeopardizing co-operation in the acreage-control program that is a central element in government policy. The machinery for dampening price advances at Chicago exists in the export subsidy. Our impression is that, if by the time the new crop begins to be harvested in June, Chicago futures prices stand at present premiums over Liverpool or at higher ones, export subsidy rates will be lowered and the spread between Chicago and Liverpool thereby lessened. The broad expectation is that if Liverpool prices tend to advance (as seems moderately probable), the premium of Chicago over Liverpool will decline with reduction of the export subsidy rates, and Chicago prices are therefore likely not to register as large a sustained advance from present levels as may Liverpool futures. Reduction of export subsidy rates would tend to strengthen Liverpool prices by relieving pressure or threat of pressure on the import market.

Winnipeg-Liverpool relationships. — Winnipeg futures seem subject to a special price-depressing influence as compared with Liverpool. Throughout most of the past crop year, the spread between these markets has reflected a condition of less than normal abundance of Canadian wheat in world exports. Year-end stocks in Canada will probably approach 130 million bushels. If the Canadian crop of 1939 should equal about 350 million bushels, there will probably be pressure of exports so as to avoid large increase of carryover in 1940 as compared with 1939; and such pressure would be likely to result in a less favorable relationship of Winnipeg to Liverpool futures in 1939–40 than in 1938–39. But such a change in relationship may be deferred until the outlook for the new Canadian crop becomes clear in late July or in August.

The authors are indebted to Rosamund H. Peirce, Pauline S. Armstead, and P. Stanley King for tables and charts.

APPENDIX TABLES

TABLE I.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING AREAS, 1933–38*

(Million bushels)

Year	World ex-Russia[a]			United States	Other chief exporters[b]	Europe ex-Russia				French North Africa[d]	India	Others ex-Russia[a]	USSR
	Total[a]	Northern Hemisphere	Southern Hemisphere			Total	Lower Danube[c]	France, Italy, Germany	Others				
1933.....	3,810	3,268	542	552	745	1,742	367	867	508	70	353	348	1,019
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	*960*
1937.....	*3,787*	*3,343*	*444*	876	553	*1,536*	361	718	*457*	72	364	*386*	*1,200*
1938[e].....	*4,440*	*3,903*	*537*	931	811	*1,812*	458	*841*	*513*	70	402	*414*	.....
1938[f].....	*4,479*	*3,931*	*548*	931	821	*1,838*	464	*860*	*514*	73	402	*414*	.....

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

[a] Excludes China, Iran, and Iraq.
[b] Canada, Australia, Argentina.
[c] Hungary, Yugoslavia, Rumania, Bulgaria.
[d] Morocco, Algeria, Tunis.
[e] As of about Jan. 20, 1939.
[f] As of about May 20, 1939.

TABLE II.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING COUNTRIES, 1933–38*

(Million bushels)

Year	U.S. winter	U.S. spring	Canada	Australia	Argentina	Uruguay	Chile	Brazil, Peru	Hungary	Yugoslavia	Rumania	Bulgaria	Morocco	Algeria	Tunis
1933...	376.5	175.2	281.9	177.3	286.1	14.7	35.3	7.98	96.4	96.6	119.1	55.5	28.9	32.0	9.2
1934...	438.0	88.4	275.8	133.4	240.7	10.7	30.1	7.13	64.8	68.3	76.6	39.6	39.6	43.5	13.8
1935...	465.3	161.0	281.9	144.2	141.5	15.1	31.8	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	188.0	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	145.0	316.0	15.3	....	....	96.8	100.9	181.5	79.0	23.9	32.1	14.0
1938[b]..	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

Year	United Kingdom	Eire	France	Italy	Germany	Austria	Czecho-Slovakia[c]	Switzerland	Belgium[d]	Netherlands	Denmark	Norway	Sweden	Spain	Portugal
1933...	62.4	1.98	362.3	298.5	205.9	14.6	72.9	5.44	16.1	15.3	11.5	.76	26.3	138.2	15.1
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[e]	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[e]	14.5	51.3	6.18	16.8	12.6	13.5	2.50	25.7	*110.2*	14.7
1938[a]..	73.3	*8.00*	*345.4*	297.3	198.5[e]	*16.2*	65.7	6.10	19.6	15.1	16.9	2.61	30.2	*95.5*	16.5
1938[b]..	73.3	7.40	*358.2*	297.3	205.0[e]	16.2	65.7	7.79	21.9	15.1	16.9	2.64	30.2	*96.0*	16.5

Year	Poland	Lithuania	Latvia	Estonia	Finland	Greece	Turkey	Other Near East[f]	Egypt	Japan	Chosen	Manchukuo	Mexico	South Africa	New Zealand
1933...	79.9	8.2	6.72	2.45	2.46	28.4	98.2	16.7	40.0	40.4	8.9	52.5	12.1	11.5	9.04
1934...	76.4	10.5	8.05	3.11	3.28	25.7	99.7	21.5	37.3	47.7	9.3	23.9	11.0	16.4	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]..	84.1	9.1	7.05	3.06	7.97	35.9	160.4	*29.3*	45.9	45.2	10.3	34.3	*12.0*	17.4	....
1938[b]..	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

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

[a] As of about Jan. 20, 1939.
[b] As of about May 20, 1939.
[c] Old boundaries.
[d] Including Luxemburg.
[e] Including the Saar.
[f] Syria and Lebanon, Palestine, Cyprus.

TABLE III.—WHEAT RECEIPTS IN NORTH AMERICA, NOVEMBER–APRIL 1938–39, WITH COMPARISONS*

(*Million bushels*)

Year	United States (13 primary markets)							Canada (country elevators and platform loadings)						
	Nov.	Dec.	Jan.	Feb.	March	Apr.	July–Apr.	Nov.	Dec.	Jan.	Feb.	March	Apr.	Aug.–Apr.
1933–34.....	11.6	11.2	8.7	10.0	9.1	8.4	163.1	23.0	10.3	10.4	8.3	9.1	7.3	196.0
1934–35.....	9.2	7.8	5.1	3.8	4.7	6.4	141.7	23.6	12.5	3.9	8.8	8.1	6.6	200.7
1935–36.....	14.5	9.9	9.3	5.5	9.8	7.4	203.6	21.0	14.2	3.2	2.1	7.2	4.6	198.8
1936–37.....	10.7	10.4	7.8	6.1	7.6	8.9	191.1	8.5	8.1	2.8	3.1	5.8	4.2	150.8
1937–38.....	16.1	10.6	10.9	8.5	10.6	10.9	299.7	9.8	5.2	5.6	3.2	4.0	4.6	115.8
1938–39.....	19.1	14.9	11.9	9.5	13.7	16.0	313.3	21.2	9.6	4.6	2.6	5.5	5.1	272.3

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

TABLE IV.—WHEAT VISIBLE SUPPLIES, JANUARY–MAY 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						
Jan. 1											
1934.....	476.5	132.5	2.3	227.6	14.0	376.4	20.7	19.1	39.8	50.0	10.3
1935.....	447.8	91.0	1.0	230.2	27.6	349.8	25.4	16.1	41.5	45.5	11.0
1936.....	441.5	76.7	.0	226.4	34.8	337.9	20.2	10.3	30.5	68.0	5.1
1937.....	267.1	62.4	.0	81.6[a]	27.8	171.8	35.9	9.0	44.9	44.5	5.9
1938.....	283.7	94.5	1.9	49.2[a]	4.7	150.3	31.4	13.0	44.4	82.0	7.0
1939.....	430.4	128.7	.4	157.1[a]	7.9	294.1	24.7	18.4	43.1	82.8	10.4
May 1											
1934.....	454.1	88.8	2.2	207.4	1.5	299.9	30.5	14.4	44.9	88.0	21.3
1935.....	370.1	39.5	1.0	203.9	11.9	256.3	30.1	10.8	40.9	54.5	18.4
1936.....	309.6	40.7	.0	173.3	11.9	225.9	33.2	9.8	43.0	31.5	9.2
1937.....	210.0	26.3	.0	55.9[a]	10.3	92.5	51.0	12.3	63.3	39.5	14.7
1938.....	197.4	43.2	.7	38.0[a]	.7	82.6	42.0	9.6	51.6	50.0	13.2
1939											
Feb. 1.....	417.3	108.9	.3	147.8[a]	6.2	263.2	39.3	15.6	54.9	84.5	14.7
Mar. 1.....	388.8	95.5	.2	141.6[a]	3.6	240.9	40.2	18.7	58.9	69.0	20.0[b]
Apr. 1.....	353.2	82.7	.1	132.1[a]	1.8	216.7	31.0	24.0	55.0	56.5	25.0[b]
May 1.....	335.5	74.9	.0	130.3[a]	.8	206.0	32.6	23.9	56.5	46.5	26.5[b]

* 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 published totals.

[b] Approximate; see p. 368.

TABLE V.—WHEAT STOCKS IN THE UNITED STATES AND CANADA, ABOUT APRIL 1, 1934–39*

(*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.....	119.3	87.2	97.1	91.7	395.3	2.2	72.1	109.9	108.6	6.7	1.4	298.7	5.7
1935.....	98.7	68.1	51.9	74.9	293.6	1.0	60.5	103.1	111.5	5.1	2.8	283.0	16.2
1936.....	99.0	50.0	49.9	72.0	270.9	.0	46.8	77.9	112.2	6.6	3.3	246.8	16.4
1937.....	71.5	39.0	34.7	66.0	211.2	.0	44.2	29.7	34.3	4.4	2.6	115.2	14.1
1938.....	124.7	73.5	54.4	79.9	332.5	1.0	39.0	18.5	23.4	1.4	1.3	83.6	1.1
1939.....	189.1	92.6	82.7	82.5	446.9	.1	61.2	47.6	83.8	7.0	1.2	200.8	1.8

* 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.

TABLE VI.—UNITED STATES FLOUR PRODUCTION, EXPORTS, AND NET RETENTION, MONTHLY, JULY–APRIL 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
July	9,416	8,415	8,507	10,028	8,914	9,021	320	308	447	9,708	8,606	8,574
Aug.	9,148	8,678	9,160	9,753	9,193	9,714	356	430	454	9,397	8,763	9,260
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	....	8,844	8,334	8,880[a]	378	481	700[a]	8,466	7,853	8,180[a]
July–Apr.	85,085	84,761	....	90,707	89,954	93,121[a]	3,719	4,633	5,543[a]	86,988	85,321	87,578[a]
July–June	100,264	100,974	....	106,803	107,147	.....	4,495	5,649	....	102,308	101,498	102,600[a]

* 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 estimate.

TABLE VII.—INTERNATIONAL SHIPMENTS OF WHEAT AND FLOUR, WEEKLY FROM JANUARY 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
Jan. 7	7.22	4.01	.60	.82	.38	1.15	.00	.26	4.89	1.54	1.03	2.32	2.33	.50	1.83
14	11.34	4.77	1.69	2.18	.00	2.33	.00	.37	9.34	3.75	2.70	2.89	2.00	.72	1.28
21	11.37	4.71	2.27	2.02	.17	1.78	.00	.42	8.23	3.83	1.98	2.42	3.14	1.18	1.96
28	12.55	5.50	2.11	2.80	.28	1.52	.00	.34	10.18	5.09	3.43	1.66	2.37	.42	1.95
Feb. 4	14.27	6.35	3.81	1.99	.11	1.87	.00	.14	11.08	3.86	4.12	3.10	3.19	.71	2.48
11	13.17	4.69	2.27	3.61	.22	1.85	.00	.53	9.63	3.78	3.01	2.84	3.54	.79	2.75
18	11.67	3.91	3.29	2.92	.00	1.21	.00	.34	8.05	2.94	3.03	2.08	3.62	.86	2.76
25[c]	10.47	5.32	1.18	2.38	.25	.77	.00	.57	6.42	2.81	1.41	2.20	4.05	.80	3.25
Mar. 4	13.22	6.79	1.54	3.58	.22	.74	.00	.35	7.66	3.40	2.19	2.07	5.56	.66	4.90
11	9.13	4.42	2.10	1.74	.00	.56	.00	.31	6.31	2.56	2.60	1.15	2.82	.65	2.17
18	10.51	4.57	1.94	2.35	.00	1.08	.00	.57	6.37	2.07	2.43	1.87	4.14	1.28	2.86
25	8.12	2.13	2.49	2.31	.12	.65	.00	.42	5.26	1.42	2.49	1.35	2.86	.53	2.33
Apr. 1	12.62	3.78	4.79	2.59	.13	1.18	.00	.15	8.88	2.21	3.38	3.29	3.74	.65	3.09
8	10.75	3.75	3.21	2.84	.17	.58	.00	.20	7.49	2.65	1.90	2.94	3.26	.59	2.67
15	10.98	3.07	3.55	2.24	.00	1.86	.00	.26	7.56	2.01	3.17	2.38	3.42	.48	2.94
22	11.32	3.48	4.11	1.90	.00	1.68	.00	.15	6.90	2.18	1.12	3.60	4.42	1.63	2.79
29	11.60	3.74	4.29	2.08	.09	1.18	.00	.22	7.02	2.56	1.32	3.14	4.58	.77	3.81
May 6[d]	10.93	4.22	3.79	1.81	.00	.68	.00	.43	7.23	2.38	2.14	2.71	3.70	....	....
13[d]	12.32	5.94	3.27	1.65	.00	.85	.00	.61	....	....	....	....	....	....	....

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

[a] Including Uruguay.

[b] North Africa, etc.

[c] On this date Broomhall revised his cumulative seasons total upwards (by .78 million bushels from North America to the United Kingdom); but weekly data here given were not revised.

[d] Preliminary.

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	3.68	.00	.41	.19	.37	.26	(.79)	....
Nov.	6.19	23.77	3.92	3.93	1.97	.39	7.97	.00	.32	.17	.23	.33	(.28)	....
Dec.	6.78	17.48	6.21	4.18	.87	.26	6.37	.00	.39	.14	.24	.13	(.28)	....
Jan.	11.92	9.42	9.89	9.88	1.46	.22	4.27	.00	...	(.04)	.38	.50	(.87)	....
Feb.	11.04	7.02	10.22	7.81	2.95	.33	3.25	.00	.42	.09	...	...	(.98)	....
Mar.[b]	10.46	8.12[c]	9.62	12.71	1.91	.22	2.28	.12	...	.23	...	...	(.66)	....
Aug.–Mar. 1938–39[d]	67.36	113.53	61.10	52.59	20.31	4.86	33.59	.12	3.70	.74	1.90	2.10	(.61)	....
1937–38	73.05	66.20	70.10	46.45	7.30	4.34	27.64	6.04	(1.64)	6.79	3.37	1.55	10.25	36.79
Average[e]	9.47	128.51	68.55	88.64	13.60	4.39	11.80	3.15	2.63	7.60	1.72	1.95	4.10	20.35

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

Month or period	United Kingdom	Eire	France[f]	Italy	Germany	Austria	Czecho-Slovakia[g]	Switzerland	Belgium[h]	Netherlands	Denmark	Norway	Sweden	Portugal
Aug.	16.58	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	...
Feb.	19.39	...	(.61)	.82	2.21	...	(.50)	1.26	2.55	1.76	.26	.44	(.13)	...
Mar.[b]	26.01	...	(1.73)[i]	.82	2.52	...	(.27)	1.03	3.57	3.02	.39	.44	.01	...
Aug.–Mar. 1938–39[d]	144.69	11.00	(.51)	4.67	31.44	5.50	(1.33)	11.99	22.96	19.81	3.84	5.26	1.06	2.50
1937–38	125.66	9.56	9.83	1.09	26.95	4.49	(.79)	10.44	26.53	16.50	4.15	4.76	(1.17)	.25
Average[e]	134.02	10.20	5.76	6.99	6.02	5.10	(.31)	11.06	27.77	14.97	7.55	5.17	(.10)	.35

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

Month or period	Poland	Lithuania	Latvia	Estonia	Finland	Greece	Syria, Lebanon	Egypt	Japan	Manchukuo	China	Cuba[j]	South Africa	New Zealand
Aug.	(.10)	(.03)	.18	.00	.36	1.94	(.04)	.00	(1.79)	1.39	1.17	.49	1.70	.23
Sept.	(.17)	(.07)	.00	.02	.40	.54	.05	.02	(.90)	1.33	.61	.36		.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		.06
Dec.	(.28)	(.18)	.31	.00	.08		(.02)	.01	(.75)	2.07	.07	.43	.01	.13
Jan.	(.42)	(.27)	.00	.00	.09	.61	(.26)	.01	(.50)	...	.31	.44	...	.05
Feb.	(.24)	...	...	...	.11	...	...	...	(.51)	...	...	.54	...	.64
Mar.[b]	(.27)	...	...	...	.10	...	...	...	(.33)	...	...	.41	...	...
Aug.–Mar. 1938–39[d]	(2.18)	(1.00)	.60	.04	1.70	8.00	(.15)	.10	(7.50)	...	...	3.47	1.80	1.50
1937–38	(.22)	.00	.64	.04	2.01	10.32	.59	(.72)	(6.34)	3.44	3.46	3.43	.00	2.79
Average[e]	(2.33)	(.48)	(.12)	(.00)	2.42	9.57	(.15)	.26	.42	10.80	6.22	3.12	.19	.85

* 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 April were 4.07 million bushels.
[d] Including our estimates for missing monthly data.
[e] Five years ending 1937–38.
[f] Net trade in "commerce général."
[g] Old boundaries through September.
[h] Including Luxemburg.
[i] Net trade in "commerce spécial."
[j] Gross imports of flour from the United States.

TABLE IX.—WHEAT DISPOSITION ESTIMATES, ANNUALLY FROM 1933–34*

(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]		Total	To Mar. 31	From Apr. 1	
	A. UNITED STATES (JULY–JUNE)											
1933–34....	378	552	930	440	78	+110	628	302	28	21	7	274
1934–35....	274	526	800[d]	450	83	+120	653	147	(1)[e]	(1)[e]	0	148
1935–36....	148	626	774[d]	466	88	+106	660	114	(28)[e]	(24)[e]	(4)[e]	142
1936–37....	142	627	769[d]	471	97	+141	709	60	(23)[e]	(23)[e]	0	83[f]
1937–38....	83[f]	876	959	468	95	+135	698	261	107	75	32	154[f]
1938–39[g]...	154[f]	931	1,085	470	79	+146	695	390	90	...	...	300
1938–39[h]...	154[f]	931	1,085	470	78	+152	700	385	110	80	30	275
	B. CANADA (AUGUST–JULY)											
1933–34....	210	282	492	43	30	+32	105	387	194	133	61	193
1934–35....	193	276	469	43	32	+27	102	367	165	126	39	202
1935–36....	202	282	484	45	33	+44	122	362	254	161	93	108
1936–37....	108	219	327	44	34	+21	99	228	195	156	39	33
1937–38....	33	180	213	43	33	+27	103	110	87	66	21	23
1938–39[g]...	23	350	373	43	33	+22	98	275	145	...	..	130
1938–39[h]...	23	350	373	44	33	+21	98	275	145	114	31	130
	C. AUSTRALIA (AUGUST–JULY)											
1933–34....	55	177	232	33	13	+15	61	171	86	60	26	85
1934–35....	85	133	218	32	13	+ 7	52	166	109	75	34	57
1935–36....	57	144	201	33	13	+10	56	145	102	74	28	43
1936–37....	43	151	194	32	15	+ 6	53	141	102	64	38	41
1937–38....	41	188	229	33	15	+ 5	53	176	126	70	56	50
1938–39[g]...	50	145	195	34	13	+ 8	55	140	65	...	..	75
1938–39[h]...	50	151	201	34	13	+ 9	56	145	90	61	29	55
	D. ARGENTINA (AUGUST–JULY)											
1933–34....	75	286	361	66	23	+ 7	96	265	147	89	58	118
1934–35....	118	241	359	69	17	+ 6	92	267	182	127	55	85
1935–36....	85	141	226	69	21	+ 1	91	135	70	53	17	65
1936–37....	65	249	314	70	23	+ 8	101	213	162	127	35	51
1937–38....	51	185	236	71	25	+ 3	99	137	72	46	26	65
1938–39[g]...	65	316	381	71	21	+ 9	101	280	135	...	..	145
1938–39[h]...	65	320	385	71	22	+12	105	280	105	53	52	175

* 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 January 1939.

[h] Estimates as of May 1939.

TABLE X.—SELECTED WHEAT PRICES, WEEKLY FROM JANUARY 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)
	May	July-Oct.[a]	May	Oct.	Mar.-May[b]	May	Sept.						
1939													
Jan. 7	63	64	63	63	..	70	71	68	72	74	79	74	68
14	63	64	62	62	60	69	70	67	71	73	79	72	68
21	63	64	62	63	60	69	70	68	70	72	80	72	68
28	64	65	63	64	60	70	70	69	72	74	80	73	67
Feb. 4	63	64	63	63	60	69	70	69	70	74	80	73	66
11	62	64	62	63	60	68	69	69	68	73	78	71	67
18	62	64	62	63	60	68	69	69	68	72	76	73	68
25	62	64	62	64	60	69	70	70	71	73	78	73	68
Mar. 4	62	63	62	63	60	69	70	70	69	73	79	74	68
11	60	62	61	63	60	68	69	69	69	73	77	74	68
18	60	62	60	61	60	68	69	69	69	73	76	72	66
25	60	61	60	62	60	68	69	69	68	73	77	75	68
Apr. 1	60	61	60	62	60	68	69	69	69	74	76	74	68
8	58	62	60	62	60	68	68	69	69	75	77	74	68
15	59	63	60	62	60	69	69	71	69	76	79	74	69
22	59	64	61	63	60	69	68	71	69	76	77	74	70
29	59	64	62	64	60	71	71	74	71	78	79	75	71
May 6	61	65	65	66	60	75	73	78	74	82	82	78	..
13	60	65	65	67	60	78	74	80	..	..	..	..	..

Week ending	British parcels	Liverpool (Tuesday prices)					European domestic				Winnipeg		Buenos Aires 80-kilo[f]
		No. 1 Man.	No. 3 Man.	No. 1 Dk. H.W.[c]	Arg. Rosafé	Australian[d]	Great Britain	France[e]	Germany[e]	Italy[e]	Wtd. average	No. 3 Man.	
1939													
Jan. 7	69	83	76	67	63	69	55				54	52	59
14	71	82	76	66	62	69	55	151	226	212	55	51	59
21	67	82	75	66	62	69	55	(210.0)	(20.7)	(148)	55	51	59
28	67	82	76	66	64	69	55				54	52	59
Feb. 4	71	83	77	69	64	69	54				53	52	59
11	68	82	76	69	63	68	54	152	228	212	53	51	60
18	68	82	75	67	63	67	53	(211.5)	(20.9)	(148)	55	52	60
25	70	83	76	67	63	67	53				52	53	60
Mar. 4	64	82	76	67	62	66	52				56	53	60
11	66	82	76	..	62	64	52	154	230	212	55	52	60
18	63	81	75	64	62	64	52	(213.0)	(21.1)	(148)	53	50	60
25	61	83	76	66	59	64	51				54	51	59
Apr. 1	64	82	74	64	58	58	51				53	51	59
8	64	78	70	..	59	62	51				52	51	..
15	63	79	72	..	59	66	52	155	232	212	54	52	..
22	65	79	72	..	60	66[g]	53	(214.5)	(21.3)	(148)	55	53	..
29	62	79	72	..	60	67	56				57	55	..
May 6	..	82	71	..	63	69[g]	..				61	58	..

* 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] July future through April 1.

[b] March future through March 11.

[c] Dark Hard Winter, Gulf shipments to London.

[d] To London.

[e] Fixed prices. Data in parentheses are prices in francs, marks, and lire per quintal respectively. For France this basic price to producers is subject to tax deductions of 22–49 francs per quintal. See *Commercial Intelligence Journal*, Oct. 22, 1938, pp. 726–27.

[f] December 17, 49; December 24, 59; December 31, 59.

[g] Cargo.

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