WHEAT STUDIES

OF THE

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WORLD WHEAT SURVEY AND OUTLOOK MAY 1937

FROM January to mid-May wheat prices fluctuated widely with strong swings in market sentiment, mainly in response to variations in apparent tightness of the international supply position and changes in prices of other commodities. New-crop developments became important in May. Wheat exports during the period were the heaviest in several years, most notably from Argentina. They reflected large forward purchases by European importers prior to January and active buying thereafter, notably by Italy, Germany, and Spain. Despite significant imports into the United States, ex-European takings were light.

Stocks of wheat afloat and in European ports were greatly increased by the heavy exports of January–April. During May–July, these stocks will presumably decline to low levels, and exports will be small. Our revised forecast of world net exports in 1936–37 is 600 million bushels, against 522 million last year. Year-end "world" wheat stocks will fall to a record postwar low level, perhaps to only 485 million bushels as compared with about 600 million on the average in 1923–27 and 738 million in 1936.

Present crop conditions promise a substantially larger harvest for 1937–38 than in the past year; but with stocks sharply reduced, total supplies might possibly (though not probably) prove less than for 1936–37 and they are unlikely to prove much larger than in 1935–36. Prices through the summer will be especially sensitive to crop developments, particularly in North America. With the general price level much higher than in recent years, the Liverpool October future is unlikely to fall below $1.10 a bushel or the Chicago September below 95 cents even with exceptionally favorable crop developments. Severe crop damage might easily induce an extreme price advance.

STANFORD UNIVERSITY, CALIFORNIA

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WORLD WHEAT SURVEY AND OUTLOOK
MAY 1937

The tight international supply position of 1936–37 continued to dominate developments in the world wheat situation during the four months just past. Price fluctuations were naturally of large magnitude, responding to changes in market sentiment which themselves rested partly upon somewhat intangible changes in the wheat position and partly upon sentiment and price developments in markets for other sensitive commodities. Wheat futures prices declined in January, rose and fell again in February, rose very sharply through March to a peak in early April higher than any since 1929, and then fell steeply until near the end of the month. There was some recovery followed by a slight decline in the three weeks ending in mid-May. Prices at Chicago tended broadly to decline in relation to other markets, while prices at Buenos Aires tended to rise relatively. New-crop futures at all principal markets ruled at substantial discounts under old-crop futures, reflecting the tightness in the current supply position.

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International trade reported through mid-May exceeded earlier expectations, in response to active purchases particularly by Italy and Germany. Part of the heavy shipments of January–April went to swell stocks afloat to Europe. The high level of prices and favorable price spreads notably stimulated Argentine exports of new-crop wheat, which were of record size. Imports into the United States declined as domestic prices fell in relation to Canadian prices. Ex-European trade was small, European fairly large. Visible supplies and other reported wheat stocks as of early May were the lowest in many years, particularly in North America and some countries of continental Europe.

Net exports for the crop year now seem likely to approximate 600 million bushels, the largest volume of trade since 1932–33 and 40 million more than we anticipated in January. But exports in May–July, including some new-crop wheat from the United States, will represent an unusually small fraction of the year's total. Year-end "world" stocks of old-crop wheat will fall to a record low level for postwar years—about 485 million bushels as compared with a 1923–27 average of about 600 million and a postwar low (1925) of 525 million. This forecast is 35 million bushels below our January appraisal, and implies a reduction of stocks by about 250 million bushels in the course of 1936–37. Wheat disappearance, especially in the United States, has exceeded earlier expectations; here the old-crop carryover may not exceed 90 million bushels.

Large 1937 wheat crops are now practically assured in India, Mexico, and the United States winter-wheat belt, and the Northern Hemisphere already seems certain to harvest a larger crop than in 1936 despite an unfavorable winter in Western Europe and deficiency of subsoil moisture in the North American spring-wheat belt. The wide range of probable crop outturn, however, seems to exclude prospects for accumulation of world stocks to a burdensome level in 1937–38; and, in connection with the prospective low level of carryover from 1936–37, it seems to include the possibility, though not the probability, of an unprecedentedly tight supply position, unlikely to be eased by exports from the USSR.

Prices in the next few months will fluctuate with changing prospects for 1937 crops, particularly in North America. Even with exceptionally favorable crop developments through August, however, the Liverpool October future seems unlikely to fall below about $1.10 per bushel, or the Chicago September below 95 cents. The present general level of wholesale prices, the low level of year-end stocks,

and the prospect for only moderate yields per acre in importing Europe may be expected to hold possible declines to about these limits. Threats of serious crop damage in North America might easily induce an extreme price advance. Barring exceptionally unfavorable domestic crop developments, Chicago new-crop futures prices are likely to range far enough below Liverpool to permit exportation.

Supplies and Utilization

World total supplies. — The supplies of wheat available to the "world ex-Russia" for 1936–37, summarized below in million bushels, now appear a little larger than they did four months ago. Our present estimate of initial stocks is 16 million bushels higher than that published in January (see p. 396). The Australian crop estimate has been raised by 16 million bushels, but the net effect of all changes in crop estimates is slight, if we tentatively disregard a questionable upward revision of 58 million bushels in the estimate for Turkey.[1] The tabulation reveals the strikingly low level of supplies for the current crop year. Not since 1926–27 has the quantity of wheat available to the world ex-Russia been so small, and per capita supplies are smaller than in any other postwar year except perhaps 1920–21.

Between 1935–36 and 1936–37 wheat supplies were reduced most heavily in importing Europe, where moderately large initial stocks by no means compensated for the smallest crop within five years. Exporting countries, as a group, have had available approximately the same amount of wheat this year as last. The bumper outturn in the Danube basin and the more normal crop in Argentina in 1936 slightly more than offset the reduction in the stocks and crop of Canada and the poor outturn in French North Africa. Australian supplies from crop and carryover are now estimated to be about equal to last year's supplies. Again this year, the United States has faced a deficiency of good millable spring wheat, and her net imports during July–June now promise to be only a little smaller than in 1935–36.

August-July	Initial stocks	Crop[a]	USSR exports	Total supplies	Disappearance
1924-25..	682	3,165	..[b]	3,847	3,321
1925-26..	526	3,408	27	3,961	3,349
1926-27..	612	3,523	50	4,185	3,540
1927-28..	645	3,705	2	4,352	3,659
1928-29..	693	4,038	..[b]	4,731	3,777
1929-30..	954	3,607	9	4,570	3,661
1930-31..	909	3,881	114	4,904	3,907
1931-32..	997	3,868	65	4,930	3,939
1932-33..	991	3,845	17	4,853	3,770
1933-34..	1,083	3,811	34	4,928	3,779
1934-35..	1,149	3,490	2	4,841	3,736
1935-36..	905	3,547	29	4,481	3,743
1936-37					
Jan....	722	3,457	1[c]	4,180	3,660
May ..	738	3,455[d]	3[c]	4,196[d]	3,711[de]

[a] See Tables I and II.
[b] Net imports.
[c] Forecast, see p. 395.
[d] Recent revision in Turkish estimate disregarded.
[e] Based on forecast of year-end stocks; see p. 396.

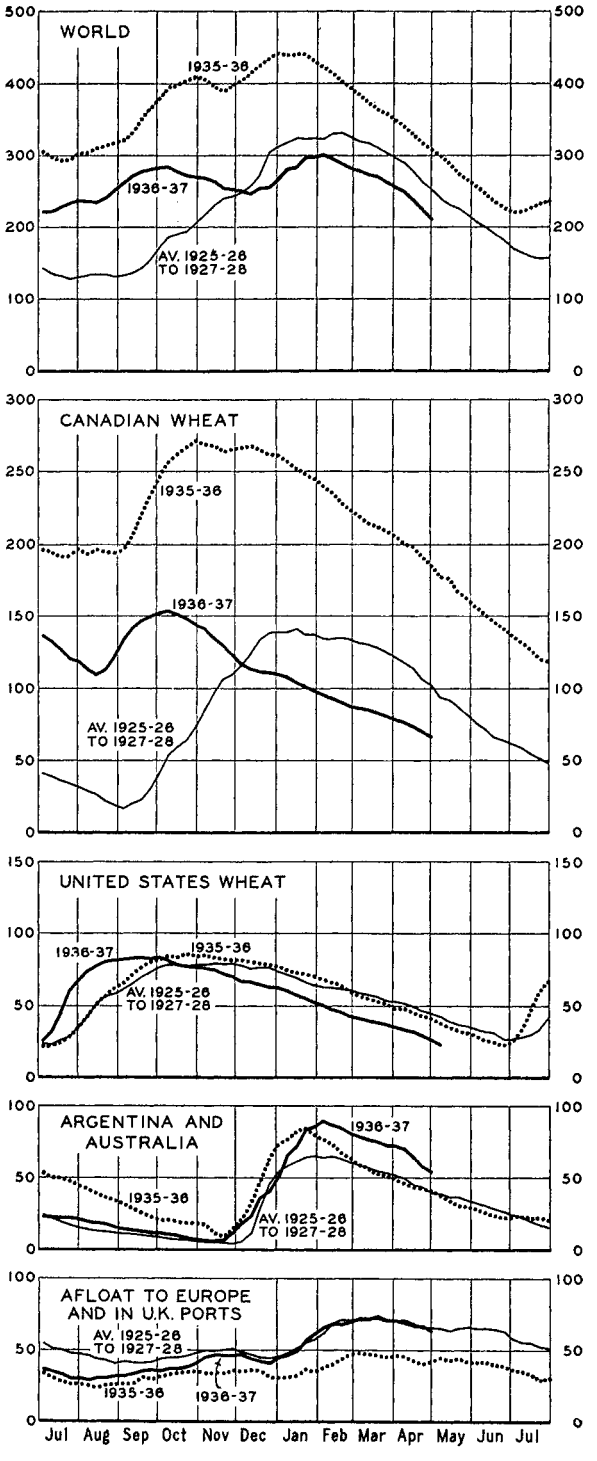
Reflecting the reduced world wheat supplies and a much less striking reduction in consumption, aggregate stocks of wheat in "visible" positions have run, since mid-December 1936, below corresponding averages for 1925–26 to 1927–28 (Chart 1). This reflects a scarcity of commercial wheat supplies not witnessed since 1925–26. North American "visibles" (particularly Canadian) have recently been smaller even than in 1925–26; but in the two Southern Hemisphere countries commercial stocks have been larger not only than in 1925–26 but also than on the average in 1925–28. Stocks afloat and in ports of the United Kingdom have stood during the past few months at about the 1925–28 average level and substantially above indicated levels in the past three or four years.

Utilization.—At this time of the year, the available statistical evidence on wheat utilization consists of fairly complete April 1 stocks data for the United States, Canada, and Germany (this year Argentina also), crop and monthly trade statistics for various countries,

[1] The U.S. Department of Agriculture recently reported an estimate of 138 million bushels for the Turkish wheat crop of 1936. This estimate, which is 58 million bushels higher than the one reported earlier, does not appear consistent with commercial indications of relatively small Turkish shipments of wheat during the present crop year. Although the earlier estimate of 80 million bushels may well be too low, it seems to accord better with current advices on exports, and implies a much more credible yield per acre, than does the figure published more recently.

CHART 1.—VISIBLE WHEAT SUPPLIES, WEEKLY FROM JULY 1936, WITH COMPARISONS*

(Million bushels)



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

and monthly milling data for several. These bits of scattered evidence yield preliminary indications summarized below.

Wheat consumption in the "world ex-Russia" now appears to be running substantially heavier this year than we earlier anticipated. Indeed, total utilization may be little, if any, smaller in 1936–37 than in either of the two preceding years, when most countries were favored with larger crops and world wheat prices were not nearly so high.

As compared with 1935–36, domestic consumption of wheat for food has presumably been substantially smaller this year only in India, French North Africa, Spain, the "Near Eastern" countries,[1] and perhaps Japan and Manchukuo. Within these areas high wheat prices and, except in India, short domestic crops have presumably tended to reduce human consumption of wheat. In some other countries, particularly Canada[2] and the countries of northwestern Europe (exclusive of Belgium), feeding of wheat has been curtailed this year in reflection of the changed grain price relationships on international markets. While French supply statistics also suggest a large reduction (around 35 million bushels) in wheat utilization, this must mainly be regarded as an indication of error in the statistics: either the 1936 crop or the inward carryover in France has been seriously underestimated.

In other countries of the "world ex-Russia" there appears to have been a general tendency to maintain or increase wheat consumption during the current crop year. The indicated increase in the United States is around 35 million bushels: in some part this may reflect overestimation of supplies for 1936–37, but it probably largely represents a true increase in the use of wheat, principally for feed and seed (see Table IX). For this country especially, our January forecast of domestic utilization was apparently too low.

Substantial increases in consumption are also indicated for the countries of eastern and central Europe. In the Danube basin, Poland, and Czechoslovakia, large domestic wheat

[1] Exclusive of Turkey if her crop is 95 million bushels or over.

[2] See Table IX.

supplies favored the expansion of consumption; but at least in Czechoslovakia and Poland, improvement in economic conditions was perhaps of equal importance. In Greece and Finland consumption has continued upward in line with the trend of recent years.

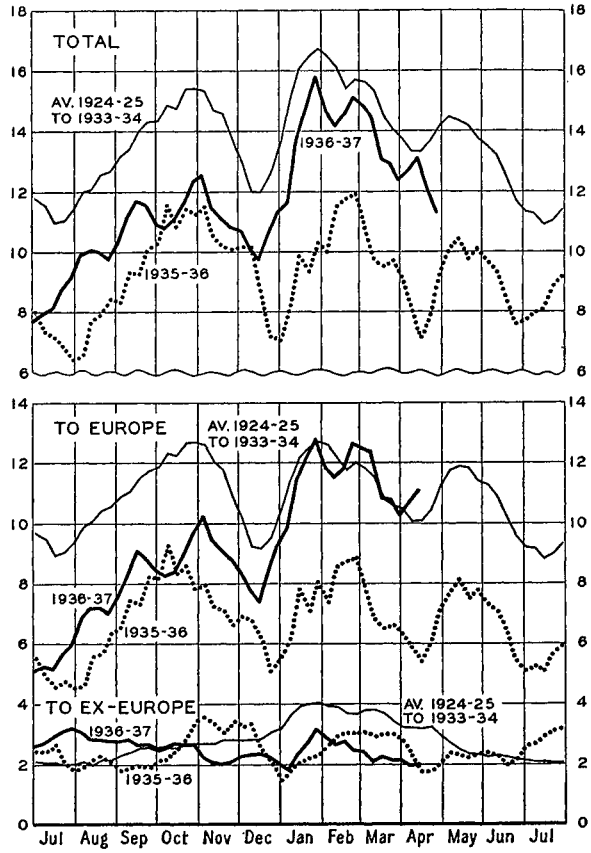
The official monthly reports on German grain stocks point to a large increase in wheat utilization in Germany during August–December 1936 and smaller increases in more recent months. We anticipate that, in the crop year as a whole, German consumption will be over 15 million bushels larger than in 1935–36. Most of this expansion may probably be attributed to the extraordinary food-price relationships which prevailed in Germany at least in the earlier months of the crop year, encouraging heavy feeding of wheat to livestock. In November, the government began to take active steps to prevent further diversion of wheat to feed. On October 30, the sale and resale of bread cereals was made subject to authorization by the various regional associations; on November 25, the schedule of bread-grain prices was changed (in effect, raised for the next few months) and producers were ordered to complete their required deliveries by the end of February; and on January 9, the sale and purchase of wheat and rye for feed were forbidden. Other recent governmental measures pertaining to milling and to flour prices were obviously designed to curtail human consumption of wheat: a decree of December 19 reduced the number of types of wheat flour that millers could produce, specifically forbidding production of the highest quality previously authorized, and by the same decree prices were raised for the remaining better grades of flour; a decree of March 4 specified that 7 per cent maize flour should be mixed with all wheat flour beginning March 15; and a decree of April 9 made further adjustments in flour prices to insure heavier consumption of the lower grades, and ordered bakers not to carry stocks in excess of three weeks' requirements. Although these restrictions may be expected to result in some reduction of wheat consumption in the latter half of the crop year, the reduction presumably will not be large enough to offset the increase indicated for earlier months.

International Trade

Total volume of trade.—Since January 1, world shipments of wheat and flour have been running at a level far above that of any of the three preceding years, mainly in reflection of a heavier seasonal import demand from continental European countries (Chart 2). Indeed, January–April shipments to Europe closely approximated the moderately high average level of 1924–34. But this relationship was not long maintained and cannot be regarded as characteristic of the current crop year.

Chart 2.—Shipments of Wheat and Flour, Weekly from July 1936, with Comparisons*

(Million bushels; 3-week moving average)



* See Table VII.

Shipments both to Europe and in total were higher in January–April (18 weeks) than in August–December (21 weeks), contrary to the customary relationship. This mainly reflected the unusual distribution of exportable supplies for 1936–37—the small old-crop supplies

available in the Southern Hemisphere countries last August and the relatively poor 1936 crops in Canada and the United States. In August–December these influences resulted in heavy premiums on near as compared with distant wheat futures, and, together with the recognized scarcity of world wheat supplies, stimulated unusually heavy forward purchases of Southern Hemisphere wheats. Under such conditions, January–April shipments inevitably were unusually heavy relative to shipments in earlier months.

While shipments to Europe have been substantially larger thus far in 1936–37 than in any of the four preceding years, shipments to ex-Europe have been notably small—the smallest since 1924–25, despite sizable imports into the United States.[1] Nevertheless, total world shipments have been larger than we anticipated, and they suggest a crop-year figure higher than we regarded as probable in mid-January (see p. 395).

Year	Reported shipments (41 weeks)	Change in stocks	Adjusted shipments (41 weeks)
1926–36 av.	553	+13	540
1931–32	640	+27	613
1932–33	505	+14	491
1933–34	414	0	414
1934–35[a]	420	− 4	425
1935–36	397	+17	380
1936–37	491	+28[b]	463

[a] For crop year beginning August 5.
[b] Including our approximation for stocks in British ports on May 15.

A noteworthy feature of world trade in wheat this year was the extent to which shipments to mid-May went to swell stocks of wheat on ocean passage and in British ports. This is shown by Broomhall's shipments data, which are summarized above for 41 weeks, in million bushels, with adjustment for changes in these stocks.

European imports.—Through mid-May, reported shipments of wheat and flour to Europe were approximately 100 million bushels larger this year than last and about 90 million above the average for the past three years. Part of the increase went to swell stocks afloat, but most of it will eventually be reflected in the import statistics of various continental countries.

At present fairly complete net import data are available only through March (Table VIII), and these obviously do not reflect the relatively heavy shipments of March–April. Nevertheless, they may properly be taken to indicate which countries have increased their imports most strikingly this year. Below are summarized for several years the August–March net imports of the principal importing countries, in million bushels:

Countries	3-year average[a]	1935–36	1936–37
British Isles	147	142	145
Belgium	28	26	28
Netherlands, Switzerland	26	25	25
Scandinavia, Finland	18	13[b]	12[b]
Austria, Czechoslovakia	6	7	6[b]
France	7[b]	7	5
Germany	3[b]	0	2
Italy	3	1	24
Greece	8	9	14
Spain, Portugal	0[b]	0	4[c]
Total	246	230	265

[a] From 1933–34 to 1935–36.
[b] Not deducting net exports in one of the years or for one of the countries named.
[c] Including our approximation for Spanish imports.

The largest recorded increase in imports is that for Italy—23 million bushels as compared with last year, and 21 million as compared with the three-year average. Other significant increases are indicated for Greece and Spain. Although British and Belgian imports together were about 5 million bushels larger this year than last, port stocks in these countries on April 1 showed almost a corresponding increase. Moreover, in the United Kingdom and several other northwestern European countries, the net imports of August–March

[1] During August–April (39 weeks) and January–April (18 weeks) Broomhall's reported shipments were as follows, in million bushels, with comparisons:

Year	Aug.–Apr. To Europe	Aug.–Apr. To ex-Europe	Jan.–Apr. To Europe	Jan.–Apr. To ex-Europe
1926–36 av.	402	122	185	66
1931–32	446	156	201	79
1932–33	345	134	164	80
1933–34	300	96	134	52
1934–35[a]	284	113[b]	123	64[b]
1935–36	274	103[b]	126	44[b]
1936–37	377	91[b]	202	40[b]

[a] For crop year beginning August 5.
[b] Including shipments to the United States.

1936–37 were slightly below the average for the three preceding years, when generally larger domestic crops were harvested but more wheat was fed to livestock and poultry.

Since last December various commentators on the wheat situation have recorded their impressions that the heavier import buying of several European countries this year partly reflected a tendency to build up "war" or "emergency" stocks. While we think it probable that the unsettled political situation in Europe may have hastened some import purchases (contributing to the peak export movement of January–March), it does not yet appear that the total trade for 1936–37 will be materially enlarged by purchases for stocks. However, prospects in June or early July for a short wheat crop in the Northern Hemisphere, particularly in importing Europe, might be associated with such a development. In general, the large European imports of the current season reflect the greater deficiencies in European domestic supplies this year as compared with the three years preceding.

A sizable fraction of the continental European imports of recent months has been admitted at lower import duties than were in force a year ago when world wheat prices were considerably lower. On February 1, the Italian import duty was 18 devalued lire per quintal this year, as against 75 pre-devaluation lire in 1936; the German special tariff was 1 reichsmark per quintal, as compared with 8.5 reichsmarks last year; the net French duty on durum wheat had been reduced from 83.2 pre-devaluation francs to 53.2 devalued francs per quintal; and the moderate Danish wheat tariff had been abolished. Since February 1 other small reductions have taken place: in Belgium the 10-franc tax per quintal on import licenses was removed; in Netherlands a similar monopoly tax of 2 florins per quintal was cut in half, and in the Irish Free State the import duty of 6 pence per hundredweight was abolished. These various reductions appear to have been made with a view to keeping domestic bread prices from rising too rapidly;[1] they probably have had little effect upon the total volume of wheat imports.

In recent years European wheat imports have been restricted less by tariffs than by other more direct measures of control, such as government import monopolies, import licensing systems, and domestic milling regulations. These controls have been generally maintained, and in some instances even strengthened in the current season; but they have been so operated as to allow a heavier flow of import wheat into several countries where domestic bread-grain supplies are less abundant than for several years past. For example, sizable Italian and German imports have been purchased through government agencies; and in France, the powerful central wheat office granted semolina manufacturers the right to use as much as 75 per cent foreign durum wheat[2] up to July 31, 1937. Even in Belgium, where the domestic milling quota has been reduced almost to nil, the relaxation rests upon reduced domestic supplies of millable wheat and higher world prices, and probably does not reflect any significant change in governmental policy.

Similar widespread reductions of wheat-import barriers (then largely in the form of tariff duties) were witnessed in the winter and spring of 1897–98 when there was a roughly similar position of wheat supplies and prices.[3] It is noteworthy that the reductions of that year proved to be quite temporary.

Ex-European imports.—To mid-May ex-European importing countries, as a group, appear to have taken around 10–15 million bushels less wheat this year than last. Since official data are lacking for Brazil and a number of other ex-European countries, it is necessary to rely on Broomhall's shipments statistics to obtain a rough idea of the distribution of imports among ex-European countries. These

[1] In line with this same tendency, the British government abolished on April 18 "quota payments" from flour millers and flour importers. This move was made because, with the advance of wheat prices to and above the "standard" price of 10*s.* per cwt., levies already collected were ample to finance "deficiency payments" for the crop year.

[2] Actually, this provision appears to have had but little influence upon imports, since foreign durum wheat prices plus the moderately reduced French tariff have been relatively too high to encourage substantial use of foreign durums.

[3] See Helen C. Farnsworth, "Decline and Recovery of Wheat Prices in the 'Nineties," *Wheat Studies*, June and July 1934, X, 350.

are shown below for August–April 1936–37, with comparisons, in million bushels:

Aug.-Apr. (39 weeks)	Brazil	China and Japan	Central America[a]	Egypt	Others ex-U.S.[b]	Total ex-U.S.	U.S.
1931–32...	25.1	74.8	45.9	7.2	2.7	155.7	...
1932–33...	21.3	77.3	26.5	3.3	5.5	133.9	...
1933–34...	23.7	38.9	26.2	2.9	4.0	95.7	...
1934–35[c]..	25.0	49.0	21.1	2.2	6.6	103.9	9.8
1935–36...	24.9	23.8	21.8	1.9	5.0	77.4	26.2
1936–37...	26.2	10.6	23.7	2.2	6.5	69.2	25.6

[a] Includes Venezuela, West Indies, Dutch East Indies, etc.
[b] India, Chile, Peru, Uruguay, Bolivia, Syria, Palestine, New Zealand.
[c] Thirty-nine weeks beginning August 5.

This year, August–April shipments to ex-European countries other than the United States totaled only 69 million bushels, the lowest figure since 1924–25. The reduction in these shipments from last year may be attributed entirely to reduced import buying in the Orient (particularly by China and Manchukuo) where high world wheat prices are normally associated with restriction of wheat imports. In the current crop year, not only high wheat prices but also large Chinese domestic food supplies and unfavorable exchange rates have operated to curtail Chinese import purchases. In fact, Chinese official trade statistics, available only through December, indicate that in the first half of 1936–37 China occupied the unusual position of a net exporter of wheat. In Manchukuo, the domestic wheat crop of 1936 was small, but other food crops were relatively better.

United States trade data, reported thus far through March, are shown below for the first nine months of the United States crop year, with comparisons, in million bushels.

While the *net* trade position of the United States appears to have been almost the same in July–March this year as last, there have been important differences in the details of trade. Imports of good hard red spring and durum wheats for domestic use and for milling in bond have been larger, imports of feed wheat smaller; and exports both of flour and of wheat grain have been appreciably increased.

Most of the increase in imports and also in domestic grain exports was recorded in the first third of the crop year. Since November, imports, first of feed wheat and later of good millable wheat, have tended to fall short of those for corresponding months in 1935–36;

July-Mar.	Net imports[a]	Imports for consumption[b]			Exports		Shipments to possessions
		Full duty[c]	10 per cent duty[d]	For milling for export	Flour	Grain	
1933–34...	(20.7)[e]	.1	0.0	8.5	14.0	13.4	2.0
1934–35...	.9	5.4	5.6	8.1	14.6	3.0	1.9
1935–36...	24.4	20.5	7.8	8.6	11.4	.2	1.9
1936–37...	23.3	27.2	4.0	10.1	13.7	1.9	2.2

[a] Data for "general trade" (see Table VIII), which are not strictly comparable with "imports for consumption" shown in the following columns.
[b] Grain imports only; imports of flour are negligible.
[c] Good millable wheat, dutiable at 42 cents per bushel.
[d] Wheat "unfit for human consumption," dutiable at 10 per cent ad valorem.
[e] Net exports.

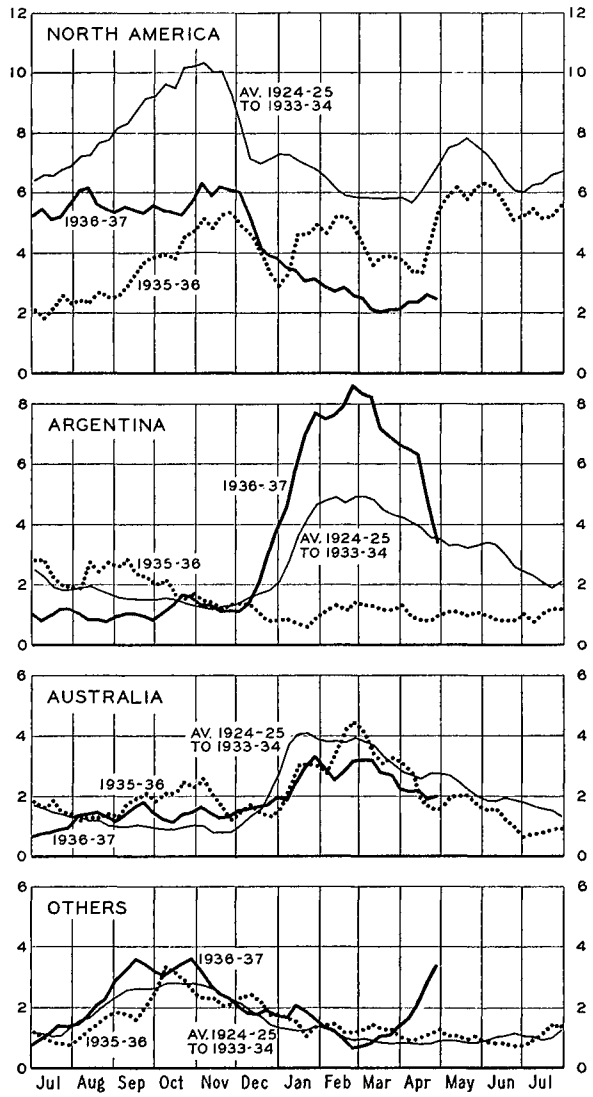
and wheat grain exports have been maintained at about the same level as last year. A factor presumably significant in curtailing United States exports during November–March was the maritime strike on the Pacific Coast from October 29 to February 5. After termination of the strike, prices remained out of line for exportation until late in March. Even if there had been no interference with Pacific Coast shipping, United States wheat exports would probably have been not more than 5 million bushels larger than they actually were.

Sources of exports.—The outstanding feature of the world wheat export movement from August to mid-May was the marked shift in source of exports as between the first half and the second half of the period (Chart 3, p. 384). Through December, Southern Hemisphere supplies were low, the United States was a net importer, and Russia and the countries of French North Africa shipped notably small quantities of wheat. As a result, Canada held the key exporting position and supplied about half of the world's import requirements. But from January to the first of May, North American shipments dropped to a new postwar low level, and Argentina ranked as the largest exporter, furnishing approximately

half of the reported shipments. Argentine shipments in this period (120 million bushels) were the largest ever recorded, either absolutely or as a percentage of world total shipments. Even though Argentine shipments in August–December were somewhat below

CHART 3.—SHIPMENTS BY SOURCES, WEEKLY FROM JULY 1936, WITH COMPARISONS*

(Million bushels; 3-week moving average)



* See Table VII.

average in size, the cumulated total through mid-May was the second largest in postwar years. Comparisons based on Broomhall's shipments are shown below for six years, in million bushels:

Aug.–mid-May (41 weeks)	Total	North America	Argentina	Australia	Danube	Russia	Others
1931–32...	640	260	118	124	56	70	12
1932–33...	505	239	92	134	6	18	16
1933–34...	414	177	101	70	26	27	13
1934–35[a]..	420	135	148	90	15	2	30
1935–36...	397	174	61	93	18	29	22
1936–37[b]..	491	170	149	82	67	0	23

[a] For crop year beginning August 5.
[b] Data for last two weeks from *Daily Trade Bulletin.*

As usual, shipments "to orders" constituted a substantial part of the large Argentine exports. During January–April total "orders" shipments approximated 94 million bushels—the largest figure on record. But diversions of "orders" shipments to British ports were no heavier than in most other recent years, whereas diversions to the Continent were notably larger.[1]

Australian exports of new-crop wheat through April were of moderate size in view of the available supplies. A larger movement, however, might have been expected on the assumption that the high prices would bring August 1 stocks to as low as 30–35 million bushels (Table IX). May–July exports must be relatively heavier than usual in relation to December–April exports if this low level of stocks, still reasonably in prospect, is to be reached.

The Danube countries, whose aggregate shipments were notably heavy in August–December, continued to export wheat freely up to mid-May. Broomhall's total shipments for the period, 67 million bushels, were the largest reported for these countries since the war. Although incomplete net export data suggest that Danubian exports may have been somewhat smaller in August–April this year than in 1931–32, it is clear that the Danube countries have contributed an exceptionally large quantity of wheat to international trade—only slightly less than Australia. From February

[1] Below is shown the reported distribution of "orders" shipments in January–April between the United Kingdom and the Continent, in million bushels, with comparisons:

Jan.–Apr.	1933	1934	1935	1936	1937
To U.K.	26.8	29.1	29.2	11.5	27.4
To Continent	25.3	12.3	17.2	7.0	56.4
Total	52.1	41.4	46.4	18.5	83.8

to mid-April, Danubian shipments fell to about an average level, but after reopening of navigation in mid-April, they again became extraordinarily heavy (Table VII and Chart 3). Since April 30 Rumanian exports have been made without the stimulus of an export bounty.

With insignificant exports from the United States, North American shipments from January to mid-May were the smallest reported in postwar years,[1] and scarcely larger than the shipments from Australia. But because of the relatively larger exports from Canada during August–December 1936, the total through mid-May was about the same as last year and considerably larger than in 1934–35.

To mid-May, aggregate shipments from Russia and "other" countries were smaller than in any of the six preceding years. Larger exports from India, Czechoslovakia, and Poland did not offset the reductions in exports from Russia and French North Africa. Algeria exported wheat about as usual, but Tunis and Morocco ranked as net importers. Although Broomhall reported no shipments from Russia, her net exports through March (including flour) totaled almost 3 million bushels, of which about a third was destined for Spain.

Among "other" countries, India has been the largest single exporter of wheat this year; her exports have reflected the improved level of world prices and outlook for a big new crop rather than heavy domestic supplies of old-crop wheat. Czechoslovakian exports of around 4 million bushels in August-March were unprecedented: they represented not commercial sales, but sales by the State Grain Monopoly mainly under governmental trade agreements. Poland exported wheat freely until early March, when the government placed an embargo on further shipments; to the end of March Polish net exports totaled 5 million bushels, the largest figure on record.

Prices and Spreads

Wheat price movements during January–May, though sensational at times, were of the character reasonably to have been expected in view of the tight international supply position.[2] With the prevailing close adjustment

[1] In 1935, however, shipments during these weeks were almost equally small.

[2] It is pertinent here to recall the main points in our appraisal of the price outlook as of January 19 (*Wheat Studies*, XIII, 255–59, January 1937). The appraisal was necessarily qualified by the supposition that we had correctly appraised the international supply position. Accumulating evidence during the interval somewhat modified the appearance of the supply position with respect both to import requirements and to export surpluses, but has left the indicated close balance between the two substantially as we judged it in January.

We then judged that "reactions much below the level represented by $1.26 and $1.31 per bushel for Liverpool and Chicago May futures respectively, as of January 19, seem to us likely to be temporary, if they occur during January–May, and further price advances to peaks perhaps as much as 20 cents higher seem not impossible." Further comments included the statements: "such declines as may occur from present levels will tend to be followed by advances during March or April, in the absence of noteworthy crop news." . . . . "In Chicago a price decline of three or four weeks' duration is a common occurrence in February or March, the average decline being about 4 cents; but Liverpool prices show little of this tendency."

After trading starts in the Liverpool October future "it may be quoted some 10 cents under the Liverpool July," and "the difference between Winnipeg July and October may widen considerably from the spread of about 10 cents that has recently prevailed." In Chicago a spread between May and July wheat of 10–20 cents is indicated by the prospective carryover, but special circumstances "may result in maintenance of a spread close to or above the upper limit of this range until some time in March at least. There is precedent for expecting a narrowing of this spread after February, however, if it remains wide until then." The July–September spread "may narrow to 2 or 3 cents or less by late June."

"If crop prospects continue to promise a liberal exportable surplus for the United States, Chicago July wheat is likely to decline relative to Liverpool—although perhaps not before March—simultaneously depressing Chicago May wheat relative to Liverpool, in addition to such depressing influence as may come from a narrowing of the May–July spread in Chicago." . . . . "Canadian wheat . . . . may go to increased premiums over other wheats in import markets, permitting an advance of the Winnipeg May future relative to Liverpool." . . . . "We judge a decline in Minneapolis relative to Winnipeg to be more likely than a rise. In such an event, Chicago May wheat would likewise decline relative to Winnipeg and would probably increase its discount under Minneapolis."

We proved mistaken in the opinion that decline of Minneapolis relative to Winnipeg would be accompanied by a greater decline at Chicago. With respect to prices of Canadian wheat in import markets, the outcome was modified by the sharp advance in premiums on Argentine wheat during March, which we did not anticipate. This lent some relative strength to the Liverpool futures and provided an exception to the general tendency toward increasing premiums on Canadian wheat, which developed as expected and persisted until early April.

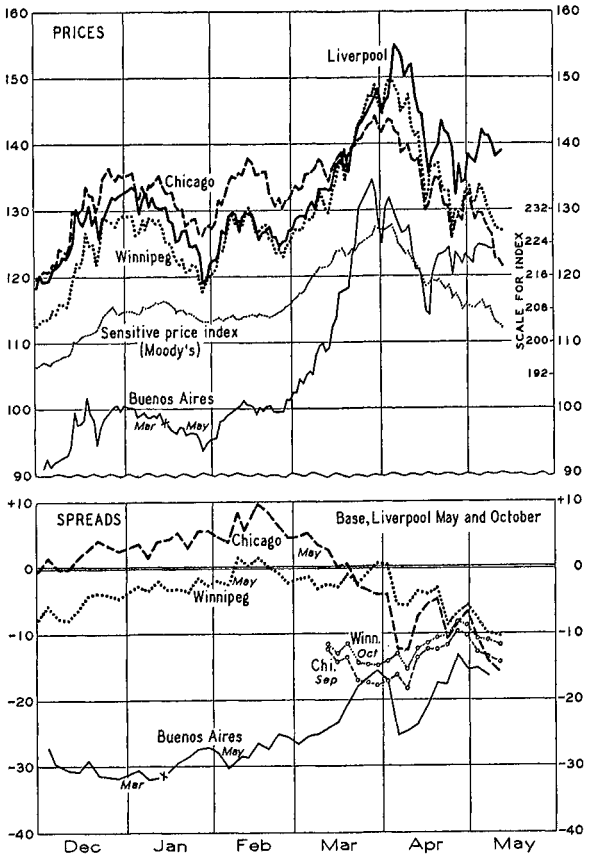
between import requirements and export surpluses, the inevitable short-term changes in the appearance of the situation naturally led to wide swings in prices. Uncertainties were increased by the withholding of information bearing on prospective Italian imports, and by the disorganization attending civil war which obscured the prospects for imports into Spain. Threats of war and of political and economic disturbances contributed to instability of price judgments. Wheat prices were sensitive and responded with unusual strength to the swings of sentiment that naturally occur in a market. Changes in tangible evidence on the degree of tightness in the international supply position or in prospects for 1937 crops were slight and played but little part, on the whole, in determining the swings of market sentiment. Commodity prices generally were in a state of rapid flux, speculation ran high in many commodities and in stocks, and sentiment in the wheat market was strongly affected at times by price movements in other commodities, and at other times perhaps by price movements in the stock markets. Conversely, price movements in the wheat market reacted on sentiment in other markets.

Speculative activity in wheat futures markets was great, but played rather less part than usual in determining the course of wheat prices. The major upward movements in wheat prices during January–March were initiated and largely carried forward by active purchasing by importers. Definite leadership on the part of the futures markets was most conspicuous in checking price advances which seemed to have gone too far, and in initiating declines. Throughout the period under review, wheat price movements rested primarily on judgments respecting the degree of tightness in the international supply position, which was felt most directly in the import market. Fluctuations in sentiment, whether among futures traders or importers, strongly influenced these judgments.

Relations with other prices.—The main swings in wheat prices during January–April included three major declines and two major advances. These movements were widely shared by prices of other sensitive commodities, though with various differences in details. Indeed Moody's index number of prices of 15 such commodities (Chart 4) shows a degree of conformity with wheat prices such as to suggest the inference that wheat prices

CHART 4.—WHEAT FUTURES PRICES AND SPREADS FROM DECEMBER 1936*

(*U.S. cents per bushel*)



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

in the main merely responded to certain general price influences. This inference would be contrary to the facts. Prices of all the sensitive commodities were responsive to swings of market sentiment in which traders in each commodity were influenced more or less by tendencies in prices of other commodities. A survey of the relations among these swings of market sentiment as they were reflected in prices of a considerable list of commodities is essential for interpretation of wheat-price

movements in relation to developments peculiarly affecting wheat. In the following paragraphs attention is confined to the fifteen commodities represented in Moody's index, plus other grains. Grains included in the index are only wheat and corn.

Superficially most noteworthy is the correspondence between wheat prices and the 15-commodity index in their general upward tendency from December (and indeed earlier) to early April. During December, wheat prices rose twice as much as the index, but from early January to the peak in early April, the advance of 10 per cent in the index was not greatly exceeded by the advance of about 15 per cent in wheat prices at Winnipeg and Liverpool, while, in the relatively weak Chicago market, wheat prices rose slightly less than did the index number.

In their causes, however, the general upward tendencies of wheat prices and of the index number were mainly unrelated. The upward movement of the 15-commodity index from early January to early April may be attributed chiefly to price advances in the metals other than silver. Iron, copper, and lead each rose more than any of the other commodities; and among the eleven non-metals in the index, only five advanced, while six were at about the same price in early April as in early January or lower. Prices of iron and steel and of the non-ferrous metals rose largely under the influence of factors of little or no direct importance in the wheat market—increasing activity in the heavy industries and expanding armament programs.

In their major swings during January–April there was close correspondence between price movements of wheat and of the metals only in the decline from January 13, which was shared in its early part by virtually all the sensitive commodities. Wheat declined from mid-February while prices of the non-ferrous metals were in the midst of their most rapid advance; and wheat prices reached their peak in April while these metals were declining most precipitously. It thus appears that the correspondence in trend between wheat prices and the 15-commodity index was largely fortuitous, while the correspondence in major swings rested chiefly on relations between prices of wheat and of commodities other than the metals.

The price rise to mid-February and the subsequent decline were not clearly reflected in the index because it includes only four commodities that shared in this movement, while most of the other commodities were moving oppositely. The commodities involved were chiefly the grains. Wheat clearly took the leadership on the upturn, which was initiated in Liverpool. Hog prices followed the grains, and coffee had a strong simultaneous movement. The decline in wheat prices was initiated in North American markets, was led by them throughout, and affected all the grains simultaneously.

Early March was a period of price advance in virtually all sensitive commodities. Copper, leading the non-ferrous metals, had been advancing since the first of February and with extraordinary rapidity from February 15. Wool and hide prices had turned upward on February 13, cocoa on February 18. The beginning of the general price advance of sensitive commodities dated from February 23, when prices of cotton and rubber turned upward. Sugar started a brief and mild upturn on February 24. Wheat, corn, and other grains joined the upward swing on February 26; silk and coffee, not until March 2, and silver in London on March 3.

On this movement, the non-ferrous metals reached their peak about mid-March and turned downward. A few days later (March 16 and 19), cocoa and silk started to decline. On the last day of March downturns began in prices of hides, cotton, rubber, and coffee, and fresh weakness appeared in prices of the commodities that had started downward earlier. Meanwhile, except for temporary weakness, prices of wheat and other grains, and of wool, continued upward until April 6, when they also joined the general decline.

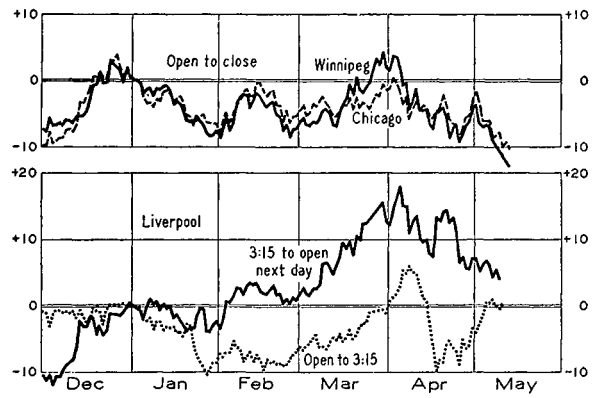
This broad view of commodity price movements during January–April suggests that the price of each commodity was subject to considerable influence from price movements in other commodity markets, especially as regards the timing of price changes, and yet that the price of each maintained a substantial degree of independence of movement and played

a part in determining the course taken by other commodity prices. There is little evidence that those common movements shared by wheat prices were occasioned to an important degree by any truly "general" price influences, whereas there is much to indicate that each common movement arose chiefly from special commodity developments in one or more important markets, which reacted sympathetically on prices of other commodities. These indications are supported by detailed study of price influences in the wheat market, outlined in subsequent paragraphs.

January 13–27.—The reasons for the decline of wheat prices from mid-January are illuminated by separation of the total price movements into elements indicative of their origin, with results as shown conveniently in Chart 5. The curves in the upper section of the chart show progressive summations of the price changes which occurred in Chicago and Winnipeg during the market sessions only, and reflect accordingly the course prices of the May futures would have taken if the only changes had been those that actually occurred between the opening and the close each day. For charting, the changes were added progressively and plotted to show the net change to and from the first trading day in January. The lower section of the chart shows similarly the price changes in Liverpool divided into two parts: *dotted line*—changes in price of the May future that occurred during the market session from its opening until 3:15, just before the opening of North American markets; *solid line*—changes between 3:15 and the opening of the Liverpool market next day.

CHART 5.—CUMULATIVE INTERVAL PRICE CHANGES IN LIVERPOOL, CHICAGO, AND WINNIPEG MAY WHEAT FUTURES, FROM DECEMBER 1936*

(*U.S. cents per bushel*)



* Price changes computed from opening and closing quotations (for Liverpool, quotations as of 3:15, just before the Chicago opening); for Chicago and Liverpool, from *Daily Trade Bulletin;* for Winnipeg, from *Grain Trade News.* The curves as plotted represent progressive summations of price changes over the designated intervals to and from the first trading day in January.

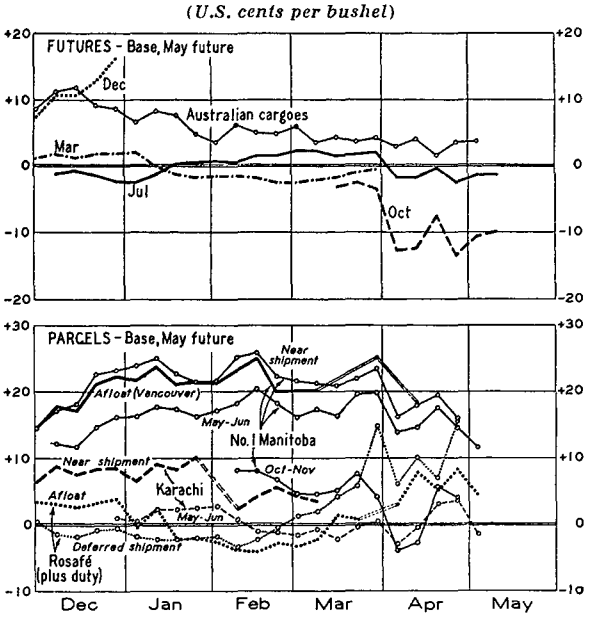
From this record it appears that during January 13–20 the price weakness originated wholly in the North American markets. Opening prices at Liverpool were generally "stronger than due"—the average of Liverpool price changes from 3:15 to its opening next day represented a decline less than the average for session changes in the North American markets. These changes were associated with price declines in virtually all sensitive commodity markets.

On January 22 severe weakness developed during the session in Liverpool, followed by similar daily declines through January 27. Prior to January 22, the extraordinarily heavy Argentine shipments had depressed prices of afloat parcels to the level of quotations on near shipments, and correspondingly depressed the price of the Liverpool March future relative to the May (Chart 6). Continuing pressure of Argentine shipments appears to have been the chief basis for the weakness in Liverpool futures prices during January 22–27.

January 28–February 25.—From January 28 to February 5 Liverpool was persistently strong (Chart 5). Reports indicated that Germany and Spain were buying freely for importation and that there were heavy diversions of orders cargoes to Italy. A report from Rome estimated Italian requirements for the year at over 90 million bushels. After February 5, leadership in the price movements shifted to North American markets, where Chicago was stronger than Winnipeg. The speculative buying in these markets advanced prices only a few cents after February 5, however; Liverpool followed the further advance reluctantly; and with a decline in Liverpool on February 16, speculative sentiment in North American markets was reversed, resulting in the loss by February 23 of over half of the previous price advance (Chart 4).

CHART 6.—BRITISH WHEAT PRICE SPREADS, FROM DECEMBER 1936*

(U.S. cents per bushel)



* Tuesday opening prices of Liverpool futures and sellers quotations, c.i.f. (duty added for Rosafé), from Broomhall's *Corn Trade News*. The sellers' quotations are Rosafé and Karachi, parcels to Liverpool; Australian (mostly West), cargoes to Liverpool; Manitoba, parcels to London.

February 26–April 6.—A new upward movement of prices began on February 26, with price advances during the first 8 days initiated about equally by Liverpool and by North American markets. During the first three of the five and one-half weeks during which the advance lasted, bullish developments within the wheat situation were not conspicuous. The dominant influence appears to have been a swing in sentiment engendered chiefly by the rapid advances in prices of substantially all sensitive commodities. Most commodities other than the grains were at this time enjoying their first substantial recovery following declines that had begun in January.

In mid-March fears of early and unexpectedly sharp curtailment of Argentine shipments became a potent factor in the wheat situation. Parcels prices of Argentine wheat for shipment a month or more later had been showing relative strength since early February (Chart 6, lower section). By the middle of March, prices of Argentine parcels afloat had developed relative strength also, and prices of parcels for deferred shipment and of Buenos Aires futures began a more rapid advance relative to other wheat prices. On March 16 Broomhall commented on the danger of early exhaustion of the Argentine surplus and the possibility of government action to restrict exports; and on March 20 his representative at Buenos Aires cabled: "The Grain Board states it is possible that it will be necessary to restrict wheat exports from May onwards . . . ."[1]

With increasing evidence of tightness in the wheat situation, wheat prices continued to advance from mid-March, although weakness had developed in prices of several important commodities that earlier had shared in the general price advance. To a greater degree than earlier in the movement price advances at Liverpool developed during the session rather than in over-night changes following advances in other markets.

During the week following March 31, after virtually all other sensitive commodities had reached their peaks, May wheat at Liverpool made a further sharp advance in the face of relative weakness in North American markets and a decline in wheat prices at Buenos Aires. Much of the strength at Liverpool appeared in opening prices which were "stronger than due," suggesting that the primary source of strength was in the market for parcels and cargoes. In this final advance at Liverpool, May wheat went to a premium over July and advanced nearly 10 cents relative to the October future. This appears as belated recognition that the apparent shortage which seemed to warrant such high prices carried with it the implication of substantially lower prices after the harvest of a new crop in the Northern Hemisphere.

Although in its earlier part the price advance in wheat from February 26 seems to have been merely a reflection of sentiment derived from strength in prices of other commodities, later developments revealed inherent strength in the wheat situation. This undoubtedly would have led to a substantial advance in wheat prices in any event, but the general upward surge of sensitive commodity prices started the rise in wheat prices earlier than it

[1] *Corn Trade News*, March 24, 1937.

otherwise would have occurred. The natural inference that the general commodity price advance served also to carry wheat prices to higher levels than would have been reached in its absence may be quite mistaken. Such high prices serve to bring substantial additional supplies into the import market. As of mid-May, it appears that the additional supplies thus brought forward will all be needed. If the price advance had come a month later, the source from which supplies could have been drawn for timely arrival in importing countries would have been more restricted, and prices might have been forced to higher levels than were reached with events transpiring as they did.

April 7–26.—The downward plunge of wheat prices from their peak was in its main features a typical reaction from a price advance of large magnitude. Several specific influences related to sentiment in the wheat market, and in commodity and security markets generally, received considerable attention during the decline; but basically the explanation lies in characteristics of human reactions peculiar neither to this particular occasion nor to any one commodity.

In the first few days the decline was led by North American markets, but during April 11–17 it was dominated by weakness during market sessions in Liverpool. On April 18 Liverpool recovered sharply at its opening, showing marked independent strength on revival of demand by importers. Prices continued upward during most of the week, and the subsequent reaction reached levels not greatly below the preceding bottom.

During most of the decline, May wheat at Liverpool maintained its premium of 10–12 cents over the October future, an indication of continued appraisal of the supply position as a tight one. At the end of the decline, prices of Argentine wheat had regained the comparatively high position relative to other prices reached at the end of March but lost temporarily in early April during the last week of the price advance at Liverpool.

April 27–May 15.—When viewed at longer perspective, the course of prices to mid-May or later may appear as part of the broad decline initiated on April 7, but as of May 15 it appears that a significant turning point was reached on April 26. Liverpool and North American markets shared in leadership of the advance to May 1. Thereafter, North American markets were persistently weak through May 13, influenced by good progress of the winter-wheat crop in the United States and by needed rains in spring-wheat territory of both the United States and Canada, by continued declines in prices of other sensitive commodities, and by liquidation of contracts in the May futures. Liverpool, meanwhile, was independently strong, advancing during its sessions through May 7 and generally opening "stronger than due" throughout the first half of May.

Price spreads.—The outstanding feature of changes in intermarket price spreads not thus far mentioned was the relative price decline in Chicago May wheat from February 17 (Chart 4). To the end of February, this decline was shared by Winnipeg May wheat and reflected merely restoration of earlier relationships disturbed in the latter part of the February price advance. From early March, Chicago moved rapidly to an export basis on new-crop futures; and with greater relative weakness in the May future, even a few small export sales of old-crop wheat from east of the Rockies were reported. The Winnipeg October future also declined relative to the Liverpool October during March, but only slightly, and Winnipeg May wheat rose relatively.

In early April, inter-market price spreads moved erratically, but for the month as a whole the distant futures in both Chicago and Winnipeg were relatively strong, resisting the price slump. Chicago May wheat fluctuated widely in relative position and Winnipeg May wheat was relatively weak. From late April to mid-May all futures at both Winnipeg and Chicago declined relative to Liverpool.

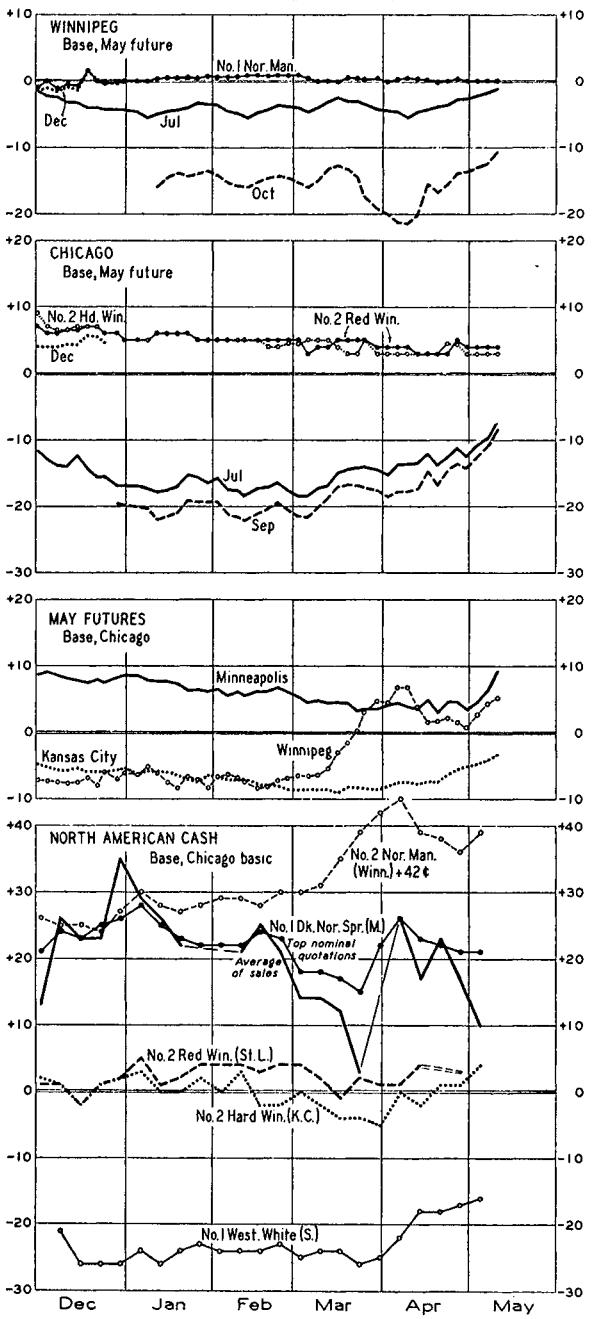
The relative advance of prices at Buenos Aires after January was aided by a decline in ocean freights from their peak in January (Table X). In the main, however, it was an advance reflected in correspondingly higher prices for Argentine wheat in import markets.

Among North American markets, the most striking changes in price relationship were

those associated with the relative weakness of United States markets during March and the special weakness of spot wheat and the May future at Chicago from late April (Chart 7). The Winnipeg May future advanced relative to the Chicago May nearly 14 cents from early March to early April and then declined 5 cents. The price of No. 2 Northern Manitoba, basis Fort William–Port Arthur, moved similarly relative to Chicago basic cash wheat. From early January, No. 1 Dark Northern Spring wheat at Minneapolis tended to fall definitely below the price of No. 2 Manitoba plus duty, thus checking United States importations. From mid-February to late March, No. 1 Dark Northern at Minneapolis was markedly weaker than cash wheat at Chicago, but recovered sharply at the end of March.[1]

CHART 7.—NORTH AMERICAN WHEAT PRICE SPREADS, FROM DECEMBER 1936*

(U.S. cents per bushel)



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

In the British market, changes in relations among prices of parcels and cargoes from different countries (Chart 6) reflected chiefly the influences affecting relations among futures markets, already discussed. In January, Argentine and Australian wheat in near posi-

[1] Paucity of carlot sales of No. 1 Dark Northern at Minneapolis rendered the weighted average prices erratic and unreliable. The closely comparable average of top prices quoted on 59-lb. No. 1 Dark Northern, as quoted by the Closing Price Committee of the Minneapolis Chamber of Commerce, better reflects the course of prices on this grade of wheat.

tions declined relatively, along with the March future, under heavy shipments that exceeded immediate requirements. Choice White Karachi, though slightly above Australian during much of January, sold generally at about the same price as Australian wheats. Both wheats came into still closer relations with the Liverpool May future as prices of Argentine wheats for deferred shipment moved above a level that would permit their delivery on futures contracts. Manitoba wheats, though exported at a rate that promises to exhaust the Canadian surplus, were nevertheless in relatively limited supply and brought substantial premiums over the soft wheats. Premiums on No. 1 Manitoba were 15–20 cents a bushel until they decreased in April, partly at least because of prospective competition with new-crop hard winters from the United States in August and September.

Price differences according to expected date of arrival of shipments were large except on Australian wheats. Until mid-March Canadian wheat for near or moderately deferred shipment was generally at a moderate "carrying-charge" premium over wheat afloat, as was Argentine wheat after January. May–June shipments of both Manitoba and Karachi wheats were at substantial discounts under prices of the same wheats for near shipment, in recognition of the effects of opening of navigation on the St. Lawrence and the Great Lakes, in the one instance, and of harvest of the new crop, in the other. No. 1 Manitoba for shipment from the new crop was quoted at only 8–12 cents a bushel over the Liverpool October future except during late April.

In Liverpool, price relations among futures of different months gave little recognition until April of shortage of supplies for the current season. The heavy Argentine shipments had provided a temporary surplus resulting in mid-January in "carrying charges" between the March and May futures and even between the May and July; and until the end of March the October future was at a discount of only 2–3 cents under the May. After early April, however, it ranged between 8 and 14 cents under the May future. In Winnipeg, the July future ranged between 2½ and 5½ cents under the May, the discount generally widening on price advances and narrowing on declines. Until after mid-March the October future was consistently about 10 cents under the July, but in the latter part of the March price advance the October went to increasing discounts, which reached 18 cents at the price peak on April 6.

In Chicago the shortage of domestic old-crop supplies was reflected in wide differences between the prices of May and July wheat, ranging between 15 and 19 cents and varying broadly with changes in the price of May wheat until early March. Thereafter the discount on July wheat tended to narrow, declining to about 6 cents on May 13. Such a narrowing of this spread occurs commonly, under the influence of forces which are obscure; but with supplies as short as they appear to be this year an opposite movement might easily have developed. Presumably the high prices reached in March encouraged liberal farm marketing of wheat. The price structure in March favored movement of wheat from Kansas City territory to Chicago, and one large grain firm is reported to have made special efforts to provide liberal supplies for delivery on the Chicago May future.[1] The July–September spread in Chicago moved much as did the May–July spread, except that it widened as prices advanced from mid-March to early April and then narrowed again. It was generally narrower than in previous years when the May–July spread was similarly wide, perhaps reflecting chiefly expectation

[1] *The Southwestern Miller* (Apr. 27, 1937, p. 27) reported: "An aggregate of close to a million bushels of hard winter wheat, including a round lot of No. 2 contract grade and various other grades between 53 and 54-lb. wheat, was purchased last week out of store in Kansas City elevators by one of the ranking grain houses in Chicago, all for shipment within 30 days or as quickly as possible to the latter city. Sizable quantities also were bought at Omaha by the same house for shipment into Chicago. The buyer previously had booked large quantities of wheat from various Kansas positions, all of which is known to be for ultimate destination to Chicago for tender on May contracts in that market. In building up large supplies for the purpose of making delivery on Chicago May, the buyer in recent months also accumulated substantial quantities of hard winter wheat at Duluth from the Pacific Northwest as well as red wheat in the central states. It is estimated the accumulations by the one house total as much as 5,000,000 bushels, being widely estimated at 3,000,000 to 4,000,000 bushels."

that the tendency toward earlier marketing of new-crop wheat which has developed since these earlier years would this year afford fairly liberal supplies of new-crop wheat by the end of July.

Trade Outlook

In January it seemed reasonable to estimate total net exports in 1936–37 at 560 million bushels. Now a figure around 600 million bushels appears to be indicated. This forecast rests upon incomplete official net export statistics through March (Table VIII), data on stocks (Table IV), and Broomhall's reports of world shipments to May 1, with conservative allowance for probable exports during May–July. European net imports of wheat and flour seem likely to be at least 25 million bushels larger than we previously anticipated, and the margin between total net exports and total calculable net imports (European and ex-European) will probably also be larger.

Although the net exports of net-exporting countries totaled about 440 million bushels during August–March, some 35 million went to increase aggregate stocks afloat and in British ports and stocks of Canadian wheat in the United States. Hence, only about 405 million bushels went directly into consumption channels or into invisible stocks positions in importing countries. If these "adjusted" net exports represent a more or less typical percentage of the crop-year total, reported net exports in 1936–37 will presumably fall within the range of 595–605 million bushels.

A similar forecast of world net exports is suggested by Broomhall's shipments data. To the first of May reported shipments of wheat and flour totaled 468 million bushels; but allowing for the net change in stocks of wheat afloat and in British ports between August 1 and May 1, "adjusted" shipments approximated only 435 million bushels. The adjusted shipments of August–April 1936–37 seem likely to represent a slightly higher percentage of the crop-year total than on the average over the past ten or fifteen years. We judge that the seasonal distribution this year will more closely resemble the distributions in 1924–25 and 1932–33, and that total reported shipments will be in the neighborhood of 580 million bushels. If shipments approximate this figure and if, as now seems probable, net exports prove to be about 20 million bushels larger than shipments, net exports will total about 600 million bushels.

These forecasts of shipments and net exports imply an extremely small volume of trade in the last third, and particularly in the last quarter, of the crop year. Since reported net exports approximated 440 million bushels in August–March, the April–July export movement is forecast at only 160 million, about the same as it was last year. Moreover, Broomhall's shipments, which totaled 468 million bushels through April, seem likely to approximate only 110 million in May–July, about 10 million less than in either of the two preceding years of postwar record low shipments.

Destination of exports.—European net-importing countries now seem likely to take at least 450 million bushels of foreign wheat in 1936–37—some 25 million bushels more than we anticipated in January, and over 90 million more than last year. Our January forecast appears to have been too low specifically for Germany, Greece, and Spain, and too high only for France.

Although Germany imported net less than 2 million bushels of wheat during August–March and has recently taken stringent measures to curtail wheat consumption (p. 380), we estimate her prospective net imports for the crop year at 25 million bushels. The report on German grain stocks as of March 31 indicates a serious deficiency of wheat supplies which may be expected to be met partly by reduced consumption in April–July, partly by reduction of reported year-end stocks to a minimum figure, and partly by increased imports. The fact that Germany imported so little wheat during the first eight months of the crop year is presumably attributable in large part to shortage of foreign exchange. Although this situation has been partially relieved during the last few months through action of the government in taking over the foreign securities and other international financial claims of private citizens, the national grain-purchasing organization can be expected to keep wheat imports down to the minimum figure required. Consequently, we anticipate

that unless war threats intensify in the near future, German net imports of wheat will total only 20–30 million bushels in 1936–37.

Italian net imports may slightly exceed the 50 million bushels we suggested in January, but such evidence as is available does not indicate that our earlier forecast was significantly in error. In April the Italian government released import statistics for August–February (the first official trade figures to be published since those for September 1935) and has recently made available data for March. These statistics indicate cumulative net import takings through March of 24 million bushels—a figure consistent with our crop-year forecast of 50 million bushels or with any forecast moderately larger or smaller. Various trade journals seem recently to have accepted an estimate of 65–70 million bushels for Italian wheat purchases to date; and there is common agreement that Italy has probably completed her purchases for the current crop year. With allowance for flour exports roughly equivalent to 10 million bushels of wheat, these trade forecasts seem to imply *net* imports of 55–60 million bushels. These are somewhat above the figure we accept, but within its possible margin of error.

Under the present war conditions in Spain, any forecast of Spanish net imports must be a sheer guess, which cannot later be checked. The Spanish government has not published trade reports during the current year; and even if such statistics were available for the ports controlled by the government, imports through ports and across boundaries controlled by the insurgent forces would remain uncovered. Moreover, since both sides in the Spanish civil war have had foreign aid, commercial estimates of Spanish wheat purchases are probably also unreliable. Through March, Russia had exported at least 1 million bushels of wheat (including some flour) to Spain, and Broomhall had reported shipments and diversions from other countries to Spain of practically 1 million bushels. That these aggregate figures are incomplete cannot be doubted, but there is no good basis for determining how much larger Spanish imports really were. In estimating total European net imports in August–March, we tentatively include a figure of 4 million bushels for Spanish imports; but the actual figure may be somewhat smaller or substantially larger. For the crop year as a whole we put prospective Spanish net imports at 10 million bushels, anticipating that these will be concentrated more heavily in April–July than in the earlier months.

Our present forecasts for Greece and France rest upon a more secure basis. Through March, Greece had already taken net imports of about 14 million bushels and in April–July she will almost certainly add 6–7 million more. Her net imports for the year, therefore, will presumably total about 21 million bushels, as contrasted with our January forecast of only 17 million. Over the past few months, it has become increasingly clear that official crop and stocks statistics for France seriously understate the quantity of wheat domestically available for 1936–37. Our January forecast of French net imports at only 17 million bushels was based upon general recognition of this fact. But through April, net imports have continued at a level lower even than we anticipated in January; and we therefore reduce our forecast to 13 million bushels.

For ex-European countries, our earlier forecast of 120 million bushels in terms of Broomhall's shipments appears about 5 million too high. In terms of net imports, the calculable trade of ex-European countries in 1936–37 is now estimated at only 92 million bushels, or a reduction of 10 million from the figure suggested in January. This reduction is based largely on recent anticipation of appreciable net exports from the United States (perhaps 5 million bushels) in July.

United States net imports may still be forecast at 25 million bushels or a little less during July–June, the United States crop year. Through March these net imports approximated 23 million bushels, and in April–June exports, largely from the Pacific Northwest, may be expected about to offset imports from Canada. But prospects for active exports from the United States beginning in July suggest that the August–July net-import total will perhaps fall to 15–20 million bushels.

Below we summarize our present trade forecasts for August–July 1936–37 in comparison with the corresponding January forecasts and

with reported trade data for the preceding four years, in million bushels:

Aug.-July	Net imports			Change in stocks[b]	Calculable demand[c]	Total net exports	Difference
	Europe	U.S.	Other ex-Europe[a]				
1932-33...	442	..	121	— 9	554	630	76
1933-34...	395	..	111	+ 2	508	557	49
1934-35...	375	4	116	—17	478	540	62
1935-36...	357	31	88[d]	+12	488	522	34
Forecast 1936-37							
Jan....	425	22	80	—12	515	560	45
May...	450	16	76	—12	530	600	70

[a] Summation of the net imports of a large number of countries (including China, Manchukuo, Brazil, Japan, Egypt, Palestine, Java and Madura, British Malaya, Netherlands Indies, Union of South Africa, and Tripoli) and exports from North America to the West Indies and to United States possessions.

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

[c] Total of the four preceding columns.

[d] Partly estimated.

A striking feature of our present forecast for 1936–37 is the indicated large margin between total net exports and the total calculable demand. This may reflect some underestimation of net imports or some overestimation of net exports. But the implication is by no means clear, for in past years the margin has varied widely and it appears not to be subject to reliable prediction.

Sources of exports.—If total net exports approximate 600 million bushels this year, they may be supplied about as follows, with comparisons, in million bushels:

Country	1930-35 av.	1935-36 reported	1936-37 forecast	
			Jan.	May
Canada	217	254	200	200
Australia	131	103	90	110
Argentina	145	70	145	155
United States	59	—[a]	—[a]	—[a]
Lower Danube	39	24	85	85
French North Africa	21	19	9[b]	10[b]
USSR	46	29	1	3
India	1	1	30	15
Others	13	22		22
Total	672	522	560	600

[a] Net imports.

[b] Not deducting net imports of net-importing countries.

Our present forecast differs from the one published in January mainly with regard to exports from Australia, Argentina, and India. From all three of these countries exports will probably be considerably larger than was anticipated four months ago. The Australian crop turned out better than early official estimates indicated (see Table II), and Argentina has recently exported wheat so heavily that her stocks as of August 1 will presumably be lower than we thought probable in January. Larger Indian exports now seem to be assured by the combination of an exceptionally large new crop and high world wheat prices.

The 22 million bushels of net exports now expected from "other" countries will perhaps be distributed about as follows: 10 million bushels from Czechoslovakia, 5 million from Poland, 6 million from the Near East (including Turkey, Syria and Lebanon, and Iraq), and 1 million from all others, including Uruguay and Chile. Of these countries, Poland, Uruguay, and Chile now have embargoes on wheat exports and, therefore, may be presumed to have completed their trading for the current crop year. In 1935–36 net exports from "other" countries were significantly increased by exports from the three Baltic states, Sweden, and Portugal, but this year each of these countries will have a small balance of imports.

Prospective Carryover

As of about August 1, 1937, world stocks of old-crop wheat will be at a record low level for postwar years, and probably around 250 million bushels smaller than last year. On the following page we show the prospective distribution of year-end stocks in 1937, with significant comparisons.

Our present forecast suggests that the "world" wheat carryover of 1937 will be about 35 million bushels smaller than seemed probable in January, with most of the indicated reduction appearing in the estimate of United States stocks. Should world wheat exports materially exceed the 600 million bushels that we now expect, world year-end stocks might be reduced more than is here indicated, and stocks in Canada, Australia, and Argentina in particular would be significantly lower.

The forecasts of year-end stocks are as follows, in million bushels, with comparisons:

Position	Estimates			Forecast 1937	
	1923–27 av.	1925	1936	Jan.	May
United States[a]	117	108	137	115	90
U.S. in Canada[a]	1	3	0	0	0
Canada	38	27	110	35	35
Canadian in U.S.	3	3	19	5	4
Australia	31	28	47[b]	30	35
Argentina	65	58	65[b]	65	60
Total	255	227	378[b]	250	224
Lower Danube[c]	37	20	25	35	34
French N. Africa[d]	13	11	12	4	4
India	46	51	35[b]	29	29
Total	96	82	72[b]	68	67
Europe ex-Danube	192	170	246	160	154
Japan and Egypt	13	8	10	9	10
Afloat to Europe	40	33	21	23	23
Afloat to ex-Europe	7	6	11	10	7
Total	252	217	288	202	194
Grand total	603	526	738[b]	520	485

[a] As of July 1.
[b] Australian stocks revised upward by 5 million bushels to correspond with official report as of November 30. Argentine and Indian stocks estimates revised upward by 5 and 6 million bushels respectively, on evidence furnished by official data on exports.
[c] Hungary, Yugoslavia, Rumania, Bulgaria.
[d] Morocco, Algeria, Tunis.

The evidence upon which our forecast of the United States carryover is based is far from clear; it may be interpreted to indicate year-end stocks as low as 80 or as high as 100 million bushels. At this time of the year, the United States carryover as of July 1 can best be estimated by reference to the official report on April 1 stocks, with allowance for net trade and approximate domestic disappearance in April–June. But this method merely indicates a wide range within which the July 1 carryover will probably fall.

As of April 1, 1937, United States wheat stocks were officially reported at 213 million bushels. From this figure it is perhaps necessary to deduct only the amount of wheat likely to be ground for domestic consumption during the last quarter of the year (about 107 million bushels) and an allowance of 25 million bushels for seed and feed on farms after April 1. The net trade of the United States in April–June will presumably be negligible this year; and the wheat fed off of farms may be assumed to be covered by unreported stocks in the hands of feeders and commercial feed dealers and manufacturers. On this calculation, stocks on July 1 might be forecast at 80 million bushels. But in two of the past six years, July 1 stocks proved to be substantially larger than would have been suggested by such calculations. On the basis of the average discrepancy in these years, stocks as of July 1, 1937, might be forecast at almost 100 million bushels. Perhaps the middle of this indicated range—90 million bushels — represents as good a forecast of the United States carryover as can now be formulated.

Changes in our forecast of year-end stocks in other positions are small and rest mainly upon trade developments and crop revisions from early January to mid-May. During this period Argentina shipped wheat so heavily that her stocks as of August 1 now seem likely to be drawn down farther than we earlier anticipated. For Australia, on the other hand, both our trade and stocks forecasts have been raised to take account of the recent upward crop revision. In Europe ex-Danube (and specifically in Czechoslovakia and Germany) the carryover of old wheat now seems likely to be smaller than was indicated in January. While it is possible that "war" stocks have been secretly accumulated in Germany and Italy, we are disposed to infer that the heavy wheat purchases of these countries will go almost wholly into current consumption.

Although our present forecast of year-end stocks in 1937 suggests the lowest total in postwar years, the stocks in several important positions are expected to be somewhat above earlier postwar low figures. Canadian and Australian stocks are both forecast at levels about 10 million bushels higher than the smallest previously recorded in postwar years; and in the Danube basin, the aggregate carryover seems likely to be around 14 million bushels larger than in either 1925 or 1935. Even in Europe ex-Danube, where year-end stocks this year will probably be at about the record low level of 1923, a large carryover is indicated for Czechoslovakia. On the other hand, if

year-end stocks in the United States fall to 90 million bushels, a new postwar low record will be established here.

Prospects for 1937 Crops

At present, the Northern Hemisphere ex-Russia seems practically assured of a larger wheat crop in 1937 than was harvested in 1936. The acreage for harvest is materially larger than that reported for any earlier year. Presumably the new crop will exceed last year's outturn by at least 200 million bushels; and under moderately favorable weather conditions in June–July it might approach or even exceed the record harvest of 1928. Bumper crops are indicated for India, Mexico, and the United States winter-wheat belt, but the crops of other areas are now predictable only within a wide range.

The only 1937 crop yet harvested is that of India. At 382 million bushels, this crop is now estimated to be the second largest on record; and it may be expected to furnish sizable wheat exports during the next few months in response to high world wheat prices.

As of May 1, the United States winter-wheat crop was officially forecast at 654 million bushels, a figure which has been exceeded only twice before in postwar years. With abandonment of acreage to May 1 officially estimated at 17.1 per cent, the area indicated for harvest is 47.4 million acres, the largest on record except for 1919.

The probable spring-wheat acreage indicated for harvest in the United States this year was officially forecast in March at 20.9 million acres. Last year spring-wheat sowings were larger than they appear to be this year, but unfavorable weather conditions in June–July 1936 resulted in such abnormally heavy abandonment of acreage that only 11.2 million acres were harvested, as compared with an average of 16.4 million for the five preceding years. Again this year the outturn of spring wheat will depend mainly on weather conditions in June–July. But even if this crop does not exceed 190 million bushels and if (as now seems probable) the winter crop is somewhat smaller than was indicated May 1, the total harvest will be substantially larger than any since 1931.

In Canada, farmers declared intentions as of May 1 to sow 24.7 million acres to spring wheat. Together with the small reported winter-wheat acreage, this indicates a total wheat area about the same as last year's and as the average for 1931–35. Over large sections of the Prairie Provinces, subsoil moisture reserves are deficient—significantly lower even than in 1936. While a large Canadian crop—say 400 million bushels or over—is not to be regarded as an impossibility for 1937, a considerably smaller crop appears much more probable. Even an outturn of 350 million bushels probably cannot be expected unless weather conditions in June–July are distinctly more favorable than usual.

The four Danube exporting countries of Europe appear to have almost as large an acreage under wheat this year as last, but the average yield seems likely to be moderate rather than notably high.

In the remaining countries of Europe ex-Russia, the total wheat acreage is now indicated to be a little smaller than in 1936, largely because reductions in central Europe and Spain seem not to have been completely offset by increases in Italy, France, and the smaller producing countries of northwestern Europe. As in 1936, acre-yields of wheat will probably be below average in northwestern Europe, where the crops were damaged this year by excessive precipitation in the winter and spring. In the southern countries (notably Italy, Spain, and Greece), which also suffered heavy reductions in wheat yields per acre last year, there are prospects of improved but not distinctly high yields in 1937. The group of countries in central Europe now seem likely to secure yields about the same as or somewhat below those of last year.

For "other" countries of the world ex-Russia, information on planted acreages and crop conditions is relatively scant. In French North Africa, the area under wheat may have been slightly reduced as compared with last year, but the general condition as of May 1 was probably considerably better this year. Presumably Japan has maintained or somewhat increased her wheat acreage, and her harvest total may well be as high as or higher than in 1936.

In Russia, sowings of winter wheat for the 1937 crop apparently exceeded those for last year's crop by about 2 million acres; and an additional increase of almost the same magnitude now seems to be indicated for the spring-wheat area. However, about a million acres of this increase represent a diversion of land from rye, so that the net increase in the area under bread grains seems likely to approximate only 3 million acres. Little information is available on the development of the Russian crops. Apparently the condition of the winter-wheat crop was fairly satisfactory in early May, whereas the future development of the spring crop seemed to be threatened by low reserves of moisture in Central Russia and the Volga basin. This year the outturn of wheat in Russia seems unlikely to hold much importance for the international wheat position of 1937–38. Domestic wheat stocks were presumably reduced to a low level in reflection of the small harvest of 1936; and whatever surplus is available from the 1937 crop will probably be drawn on for replenishment of stocks before exports are considered.

Below we attempt to summarize in terms of million bushels the present outlook for the Northern Hemisphere wheat crop ex-Russia of 1937. The indicated ranges for the various areas do not cover all possibilities of outturn, but rather the apparent probabilities based on current information and on the assumption that weather conditions in May–July will be neither extraordinarily favorable nor extraordinarily unfavorable. Attention is particularly directed to the uncertainties now surrounding any estimation of the North American spring-wheat crop. For Canada, the acreage estimate is probably reasonably accurate, but consequences of the present serious deficiency of subsoil moisture cannot be foretold. Whether this factor will exert an important influence on the outturn of wheat will depend on the unpredictable weather developments of May–July. Should precipitation in the Prairie Provinces be adequate and well distributed during these months, the low subsoil moisture reserves would not preclude harvest of a large crop. Yet, since such weather developments are probably properly to be regarded as "extraordinarily favorable," we do not allow for this eventuality in estimating the probable upper limit of the crop range for Canada.

Area	1930–34 average	1936	Prospective 1937
United States			
Winter	552	519	654[a]
Spring	180	107	185–250
Canada	349	229	265–350
Danube basin	312	382	305–360
French North Africa	75	51	64–74
India	356	352	382[a]
Total	1,824	1,640	1,855–2,070
Europe ex-Danube	1,202	1,098	1,080–1,200
Others ex-Russia	257	245[b]	245–265
Northern Hemisphere	3,283	2,983[b]	3,180–3,535

[a] Official forecasts standing May 15. In former years, forecasts available in May have often been considerably revised.

[b] Including the earlier estimate of 80 million bushels for Turkey (see Table II and p. 378).

In view of the present low level of world wheat stocks, a Northern Hemisphere crop as small as 3,180 million bushels would result in an extremely tight international wheat position in 1937–38. On the other hand, a crop as large as 3,535 million bushels (larger than in 1928), combined with an outturn of average size in the Southern Hemisphere, would not lead to the accumulation of a burdensome carryover. Prospects of another world wheat surplus seem to be quite outside of the realm of probabilities for 1937–38.

Outlook for Prices

From the standpoint of price prospects, outstanding features of the wheat situation as of mid-May are the absence of any surplus old-crop supplies; the existence of a general wholesale price level substantially above that of any year since 1930; and a scarcity of subsoil moisture in the spring-wheat territory of North America that again carries more than the usual threat of possible damage to the spring-wheat crop.

Since the world wheat carryover as of about August 1 will surely approach or set a new postwar low record, existing prospects for a wheat crop in the Northern Hemisphere substantially above the average for recent years

hold the promise of merely restoring stocks to a moderate level. Assuming average yields per acre in the Southern Hemisphere on an acreage 10 per cent larger than that harvested last year, current prospects for Northern Hemisphere crops indicate a range for total world ex-Russian supplies for 1937–38 from possibly 60 million bushels less than for 1936–37, to possibly 295 million bushels greater than for 1936–37, or about the same as for 1935–36. Russian exports appear likely to be negligible again.

The general level of commodity prices, though tending slightly downward since early April, seems unlikely to recede much further during the summer and may advance again. At over 87 per cent of the 1926 average in terms of the wholesale price index number of the U.S. Bureau of Labor Statistics, the price level is currently 19 per cent (14 points) higher than three years ago and nearly 12 per cent higher than one year ago. Moody's index number of prices of sensitive commodities stands 25 per cent higher than one year ago.

In these circumstances, even the most favorable crop developments now reasonably in prospect seem unlikely to depress the price of the Liverpool October future below about $1.10 a bushel by the end of August. Corresponding minima for the Chicago September and the Winnipeg October futures would be about 95 cents a bushel. Markedly less favorable crop developments would almost certainly be accompanied by periods of serious concern about crop outcome, during which prices would advance rapidly. Possible improvement in crop prospects in North America perhaps holds no greater potentialities for price depression than the improvement that might occur in Europe, but the possibilities for even larger price advance lie especially in developments that may occur in North America. Serious damage to winter wheat in the United States such as would induce a price advance of 15 cents is now unlikely, though not impossible.

Serious damage to spring wheat in the United States and Canada may threaten at any time between late June and harvest, or earlier if June rainfall should be scant. If soil moisture continues deficient, the crop will be highly sensitive to even moderate periods of drought and heat, as in several recent years. A rapid price advance of 20–30 cents, from whatever level might have been reached at its beginning, could easily develop from threats of serious spring-wheat crop damage. The background of recent high prices and the absence of significant reserve in the world carryover offer favorable conditions for a sharp price advance in North America. Dependence on continuing exports from North America during the summer would force Liverpool closely to follow such an advance.

Price spreads.—The Winnipeg October future may remain during May–August about 12 cents under the Liverpool October, as in mid-May, or advance relatively, unless the Canadian crop should promise to approach 350 million bushels.

Prospects for a crop as small as 265 million bushels, suggesting probable exports of less than 165 million during 1937–38, would force No. 1 Manitoba to high premiums in import markets and might permit the Winnipeg October future to rise to within 5 cents of the Liverpool October. The outcome will hinge in part on freight rates. As compared with last year, ocean freights will doubtless be higher, and perhaps freight rates on the Great Lakes also, tending toward a somewhat wider Liverpool–Winnipeg spread than last year. But in the British market, No. 1 Manitoba promises to sell at higher premiums over the Liverpool October future than during the late summer and autumn of 1936, owing to much smaller Canadian exports from the greatly reduced old-crop supplies, and the prospective greater abundance of soft wheats. Australian exports during the summer may be smaller than last year, but will be supplemented by increased exports of soft wheats from India and presumably, after July, from United States Pacific ports. The availability of substantial quantities of hard winter wheat from the United States will not greatly affect premiums on hard spring wheat in import markets.

In the United States, prices of new-crop futures at Portland and Seattle seem in line for liberal exportation after harvest of the new crop, and may remain about 25 cents under the Liverpool October unless ocean freight

rates change substantially. Prices east of the Rockies are currently near a basis which will permit moderate exports of hard winter wheat until it must meet competition of new-crop Canadian. If only a moderate surplus appears available for export, the Kansas City July future may remain only about 15 cents under the Winnipeg July, and perhaps advance relative to Liverpool in the event of a relative advance at Winnipeg. But if the United States crop promises to afford exports of over 40–50 million bushels of hard winter wheat, the Kansas City July future may decline to as much as 10–15 cents under the Winnipeg October future.

Chicago futures, currently only about 4 cents above the corresponding futures at Kansas City, may maintain this relation or fall even closer to the Kansas City futures, in response to development of a discount of soft winter wheat under hard winter. Chicago therefore appears even more likely than Kansas City to weaken relative to Winnipeg before the end of August. The position of prices at Minneapolis relative to other markets is dependent on the now unpredictable progress of the spring-wheat crop in the United States.

The spread between July and October futures at Liverpool is subject to influence by changes in prospects for exports from the United States, since the premium on July wheat reflects anticipated scarcity of importers' supplies in the late summer rather than in July. In Chicago the recent accumulation of minimum-quality No. 2 Dark Hard Winter wheat for delivery on May contracts may result in a carrying charge of 1 or 2 cents between the July and the September futures by late June unless this wheat finds an outlet not now in evidence. In Kansas City, maintenance of a small discount of September under July appears more likely.

This survey was written by Helen C. Farnsworth, Holbrook Working, and M. K. Bennett with the advice of Joseph S. Davis and Vladimir P. Timoshenko. Tables were prepared by Rosamond Peirce, charts by P. Stanley King.

APPENDIX TABLES

TABLE I.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING AREAS, 1931–36*

(Million bushels)

Year	World ex-Russia[a]				United States	Three chief exporters[b]	Europe ex-Russia			French North Africa[d]	India	Others ex-Russia[a]	USSR
	Old total	New total[a]	Northern Hemisphere	Southern Hemisphere			Total	Lower Danube[c]	Other Europe				
1931.....	3,676	3,868	3,395	473	937	732	1,434	370	1,064	69	347	349	753[e]
1932.....	3,714	3,845	3,325	520	757	898	1,488	222	1,266	75	337	290	744[e]
1933.....	3,635	3,811	3,268	543	552	745	1,742	367	1,375	70	353	349	1,019
1934.....	3,341	3,490	3,045	445	526	650	1,546	249	1,297	97	352	319	1,117
1935.....	3,387	*3,547*	*3,178*	*369*	626	565	1,574	302	1,272	70	363	*349*	1,133
1936[f].....	*3,309*	*3,457*	*2,994*	*463*	626	614	*1,485*	382	*1,103*	49	352	*331*	.....
1936[g].....	*3,315*	*3,455*[h]	*2,983*[h]	*472*	626	627	1,480	382	1,098	51	352	*319*[h]	.....

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

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

[b] Canada, Australia, Argentina.

[c] Hungary, Yugoslavia, Rumania, Bulgaria.

[d] Morocco, Algeria, Tunis.

[e] Not fairly comparable with data for later years.

[f] As of about Jan. 15, 1937.

[g] As of about May 15, 1937.

[h] Using earlier rather than revised estimate for Turkey (Table II); see p. 378.

TABLE II.—WHEAT PRODUCTION IN PRIN CIPAL PRODUCING COUNTRIES, 1931–36*

(Million bushels)

Year	U.S. winter	U.S. spring	Canada	Australia	Argentina	Uruguay	Chile	Brazil, Peru	Hungary	Yugoslavia	Rumania	Bulgaria	Morocco	Algeria	Tunis
1931...	820.5	116.3	321.3	190.6	219.7	11.3	21.2	9.52	72.6	98.8	135.3	63.8	29.8	25.6	14.0
1932...	491.8	265.1	443.1	213.9	240.9	5.4	28.7	9.36	64.5	53.4	55.5	48.1	28.0	29.2	17.5
1933...	376.5	175.2	281.9	177.3	286.1	14.7	35.3	9.10	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	7.22	64.8	68.3	76.6	39.6	39.6	43.5	13.8
1935...	465.3	161.0	281.3	142.6	141.5	15.1	31.9	....	84.2	73.1	96.4	47.9	20.0	33.5	16.9
1936[a]..	519.0	107.4	229.2	134.2	249.9	....	....	....	86.7	107.4	128.7	59.3	13.2	27.8	7.7
1936[b]..	519.0	107.4	229.2	149.6	247.8	10.5	....	....	86.7	107.4	128.7	59.3	13.2	29.8	8.1

Year	United Kingdom	Irish Free State	France	Italy	Germany	Czechoslovakia	Austria	Switzerland	Belgium[c]	Netherlands	Denmark	Norway	Sweden	Spain	Portugal
1931...	37.8	.78	264.1	244.4	155.5	41.2	11.0	4.04	14.2	6.8	10.1	.59	17.0	134.4	13.0
1932...	43.6	.83	333.5	276.9	183.8	53.7	12.2	4.00	16.1	12.8	11.0	.75	24.1	184.2	23.8
1933...	62.4	1.98	362.3	298.5	205.9	72.9	14.6	4.96	16.1	15.3	11.5	.76	26.3	138.2	15.1
1934...	69.8	3.80	338.5	233.1	166.5	50.0	13.3	5.34	17.3	18.0	12.8	1.20	28.4	186.8	24.7
1935...	65.4	6.69	285.0	282.8	171.5	62.1	15.5	5.99	15.8	16.7	14.7	1.87	23.6	158.0	22.1
1936[a]..	*55.2*	*10.00*	244.4	227.0	169.4	55.6	13.5	4.70	16.8	16.3	*12.9*	2.16	22.6	121.5	8.4
1936[b]..	55.3	7.84	253.4	224.3	162.1	55.6	13.5	4.47	17.2	16.3	11.4	2.09	21.5	121.5	8.4

Year	Poland	Lithuania	Latvia	Estonia	Finland	Greece	Turkey	Other Near East[d]	Egypt	Japan	Chosen	Manchukuo	Mexico	South Africa	New Zealand
1931...	83.2	8.3	3.39	1.74	1.12	11.2	104.9	18.8	46.1	32.3	8.7	58.4	16.2	13.7	6.58
1932...	49.5	9.4	5.29	2.08	1.48	17.1	69.0	12.9	52.6	32.8	9.0	39.4	9.7	10.6	11.06
1933...	79.9	8.2	6.72	2.45	2.46	28.4	98.2	16.7	40.0	40.4	8.9	52.5	12.1	11.8	9.04
1934...	76.4	10.5	8.05	3.11	3.28	25.7	99.7	18.7	37.3	48.4	9.3	23.9	11.0	16.9	5.93
1935...	73.9	10.1	6.52	2.27	4.23	27.2	92.6	*24.0*	43.2	48.7	9.7	34.3	10.7	20.2	8.86
1936[a]..	78.3	7.5	5.25	2.40	5.44	23.7	80.3	*28.1*	45.7	45.2	*9.0*	32.4	13.0	15.8	....
1936[b]..	78.4	7.9	5.27	2.43	5.44	23.4	138.5[e]	*20.4*	45.7	45.2	*9.0*	30.7	13.0	16.2	7.15

* 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. 15, 1937.

[b] As of about May 15, 1937.

[c] Including Luxemburg.

[d] Syria and Lebanon, Palestine, Cyprus.

[e] Revised figure open to question.

TABLE III.—WHEAT RECEIPTS IN NORTH AMERICA, NOVEMBER–APRIL 1936–37, 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.
1931–32.....	26.4	13.8	17.1	25.0	13.4	13.2	345.9	41.7	18.8	10.9	12.2	12.9	6.0	238.2
1932–33.....	17.6	13.9	12.8	9.9	12.7	15.8	230.0	38.1	18.5	11.3	11.5	20.8	10.3	329.8
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	9.0	8.0	3.2	3.2	5.9	4.2	154.5

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

TABLE IV.—WHEAT VISIBLE SUPPLIES, JANUARY–MAY 1937, WITH COMPARISONS*

(Million bushels)

Date	Total	United States grain		Canadian grain		Total North America	Afloat to Europe	U.K. ports	Total U.K. and afloat	Australia	Argentina
		United States	Canada	Canada	United States						
Jan. 1, 1926–28.....	311.1	71.4	1.9	109.9	28.8	212.0	39.4	6.2	45.6	50.2	3.3
1933.....	549.7	168.5	6.9	224.2	13.6	413.2	36.4	7.5	43.9	83.0	9.6
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
May 1, 1926–28.....	252.4	44.5	.6	93.9	8.0	147.0	58.7	7.0	65.7	28.5	11.2
1933.....	478.9	124.4	5.4	217.3	2.5	349.6	40.9	12.5	53.4	61.5	14.4
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.....	209.2	26.3	.0	55.9[a]	10.3	92.5	51.0	11.5	62.5	39.5	14.7
1937											
Feb. 1	297.5	52.3	.0	74.7[a]	23.6	150.6	54.2	7.6	61.8	73.0	12.1
Mar. 1	280.7	42.7	.0	68.0[a]	19.1	129.8	58.7	10.7	69.4	67.5	14.0
Apr. 1	254.5	34.7	.0	63.6[a]	14.2	112.5	57.2	12.7	69.9	55.5	16.6
May 1	209.2	26.3	.0	55.9[a]	10.3	92.5	51.0	11.5	62.5	39.5	14.7

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

[a] Stocks in transit by rail (2 to 6 million bushels) deducted from officially published totals to insure comparability with data for preceding months.

TABLE V.—WHEAT STOCKS IN THE UNITED STATES AND CANADA, ABOUT APRIL 1, 1932–37*

(Million bushels)

Year	United States						Canada						
	On farms	In country mills and elevators	Commercial stocks	In city mills[a]	Total in four positions	U.S. grain in Canada	On farms	In country mills and elevators[b]	In terminal elevators	In transit	In flour mills[c]	Total in five positions	Canadian grain in U.S.
1932.....	172.3	69.4	207.2	91.4	540.3	27.6	61.8	89.8	82.5	8.4	3.7	246.2	11.7
1933.....	183.2	95.9	135.5	100.3	514.9	6.4	82.6	113.8	105.7	9.8	2.6	314.5	6.0
1934.....	119.4	87.3	97.1	91.7	395.5	2.2	72.1	109.9	108.6	6.7	1.4	298.7	5.7
1935.....	98.7	68.2	51.9	74.9	293.7	1.0	60.5	103.1	111.5	5.1	2.8	283.0	16.2
1936.....	99.0	50.2	49.9	72.0	271.1	.0	46.8	112.2	77.9	6.6	3.2	246.8	16.4
1937.....	71.7	40.3	34.7	66.0	212.7	.0	46.9	29.7	34.3	4.5	2.6	118.0	14.1

* Official data of U.S. Department of Agriculture and Dominion Bureau of Statistics.

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

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

[c] In Eastern Division only.

TABLE VI.—UNITED STATES FLOUR PRODUCTION, EXPORTS, AND NET RETENTION, MONTHLY, JULY–APRIL 1936–37, WITH COMPARISONS*

(Thousand barrels)

Month or period	Production						Net exports and shipments to possessions			Estimated net retention		
	All reporting mills			Estimated total								
	1934–35	1935–36	1936–37	1934–35	1935–36	1936–37	1934–35	1935–36	1936–37	1934–35	1935–36	1936–37
July	7,325	7,387	9,416	7,719	7,719	9,840	322	296	320	7,397	7,423	9,520
Aug.	8,654	8,082	9,148	9,120	8,445	9,559	486	315	356	8,634	8,130	9,203
Sept.	8,822	9,055	8,708	9,296	9,462	9,099	489	314	470	8,807	9,148	8,629
Oct.	9,181	9,897	9,120	9,664	10,342	9,530	434	356	361	9,230	9,986	9,169
Nov.	8,211	8,274	8,019	8,643	8,646	8,379	432	302	307	8,211	8,344	8,072
Dec.	7,547	7,175	8,216	7,944	7,497	8,585	354	294	401	7,590	7,203	8,184
Jan.	8,316	8,644	8,180	8,753	9,032	8,548	319	298	358	8,434	8,734	8,190
Feb.	7,599	8,401	7,536	8,000	8,778	7,874	315	310	398	7,685	8,468	7,476
Mar.	7,986	8,252	8,402	8,406	8,622	8,780	359	328	370	8,047	8,294	8,410
Apr.	7,786	7,840	8,384[a]	8,196	8,193	8,761	333	371	450[b]	7,863	7,822	8,311[b]
July–Apr.	81,427	83,007	85,129	85,741	86,736	88,955	3,843	3,184	3,821	81,898	83,552	85,134
July–June	96,614	98,421	.....	101,609	102,843	.....	4,510	3,886	....	97,099	98,957	....

* Reported production and trade data from U.S. Department of Commerce, *Wheat Ground and Wheat Milling Products, Monthly Summary of Foreign Commerce*, and Statement No. 3009. Total production and net retention are our estimates, comparable with data from January 1925 given in WHEAT STUDIES, May 1936, XII, 335.

[a] Estimated from data in the *Northwestern Miller*. [b] Predicted.

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

(Million bushels)

Week ending	Total	Shipments from							Shipments to Europe				Shipments to ex-Europe		
		North America	Argentina[a]	Australia	South Russia	Danube	India	Other countries[b]	Total	United Kingdom	Orders	Continent	Total	U.S.	Others
Jan. 2	11.36	3.97	4.11	1.85	.00	1.13	.00	.30	9.58	2.77	3.22	3.59	1.78	.66	1.12
9	11.37	3.87	3.93	2.00	.00	1.24	.11	.22	9.40	3.35	3.33	2.72	1.97	.71	1.26
16	12.28	2.72	5.74	1.72	.00	1.66	.00	.44	10.56	1.93	4.45	4.18	1.72	.24	1.48
23	17.67	3.76	7.72	3.76	.00	1.29	.53	.61	14.43	2.77	6.74	4.92	3 24	.72	2.52
30	14.83	2.67	7.49	3.54	.00	.75	.02	.36	11.58	3.83	5.29	2.46	3.25	.34	2.91
Feb. 6	14.93	2.96	7.89	2.66	.00	1.10	.18	.14	12.18	2.22	6.15	3.81	2.75	.36	2.39
13	14.22	3.07	7.03	2.62	.00	.80	.00	.70	11.57	2.59	6.64	2.34	2.65	.38	2.27
20	13.30	2.16	7.89	2.41	.00	.51	.00	.33	10.78	2.34	5.91	2 53	2.52	.38	2.14
27	16.14	3.31	8.76	3.44	.00	.44	.00	.19	13.04	2.41	7.04	3.59	3.10	.44	2.66
Mar. 6	15.83	2.35	9.10	3.74	.00	.30	.08	.26	14.13	2.19	8.40	3.54	1.70	.25	1.45
13	12.52	1.81	7.23	2.52	.00	.39	.07	.50	10.17	1.43	5.47	3.27	2.35	.47	1.88
20	14.92	2.19	8.43	3.43	.00	.55	.12	.20	12.74	2 23	8.20	2.31	2.18	.26	1.92
27	11.72	2.03	5.99	2.31	.00	.90	.00	.49	9.50	2.49	3.44	3.57	2.22	.29	1.93
Apr. 3	12.05	2.10	6.48	2.45	.00	.44	.11	.47	10.01	1.76	5.59	2 66	2.04	.18	1.86
10	13.42	2.21	7.54	1.99	.00	.76	.35	.57	11.23	2.15	5.78	3.30	2.19	.22	1.97
17	12.63	2.84	5.50	2.05	.00	1.53	.18	.53	10.94	1.81	3.41	5.72	1.69	.18	1.51
24	13.21	2.01	5.99	2.63	.00	1.72	.07	.79	11.10	1.88	3.57	5.65	2.11	.17	1.94
May 1	10.43	3.09	2.58	1.13	.00	2.63	.10	.90	8.35	2.54	1.01	4.80	2.08	.21	1.87
8[c]	10.20	2.42	1.69	2 23	.00	2.64	.01	1.21	....	....	....	....	....	...	....
15[c]	12.49	4.74	2.07	3.05	.00	1.61	.06	.96	....	....	....	....	....	...	....

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

[a] Including Uruguay. [c] Preliminary.

[b] North Africa, France, Germany, Sweden, etc.

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

(Million bushels)

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

Month or period	United States[a]	Canada	Australia	Argentina	Chile	Hungary	Yugoslavia	Rumania	Bulgaria	Morocco	Algeria	Tunis	India	USSR
Aug.	(5.53)	22.87	4.92	4.04	.00	3.22	1.93	5.04	1.01	.00	.88	(.04)	.39	.26
Sept.	(2.99)	22.40	7.60	4.30	.00	3.68	3.38	6.72	.69	(.00)	2.03	(.02)	1.51	.37
Oct.	(2.79)	28.90	5.47	6.27	.00	2.59	2.10	7.54	(1.16	(.37)		.03	2.07	.39
Nov.	(2.81)	35.11	5.59	4.74	.00	2.54	1.70		.61	(.26)	1.15	(.19)	2.33	.28
Dec.	(2.71)	22.54	7.30	13.32	...	2.05	1.21	2.32	1.03	(.32)	1.12	(.20)	.94	.75
Jan.	(1.39)	11.18	10.66	29.56	...	2.05	.48	1.38	.27	...	1.04	...	1.04	.43
Feb.	(.64)	6.91	10.65	31.91	...	1.78	.89	.98	.16	...	.09	...	.21	.54
Mar.[b]	(.73)	6.47[c]	11.70	32.19	...	1.84	...	1.35	.14	...	...	...	.21	..
Aug.–Mar.														
1936–37[d]	(19.59)	156.38	63.89	126.32	.00	19.75	13.00	25.33	5.07	(1.50)	7.00	(.40)	8.70	3.00
1935–36	(23.33)	161.42	73.88	53.37	1.40	9.25	.10	5.52	.95	3.28	7.58	4.30	.52	27.65
Average[e]	21.10	151.23	84.51	87.39	(.05)	12.30	3.49	8.19	3.16	4.37	6.93	2.49	.49	28.95

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

Month or period	United Kingdom	Irish Free State	France[f]	Italy	Germany	Czechoslovakia	Austria	Switzerland	Belgium[g]	Netherlands	Denmark	Norway	Sweden	Portugal
Aug.	14.89	1.07	(.07)	...	.09	(.00)	1.32	1.22	3.94	1.56	.46	.53	(.60)	.03
Sept.	15.25	.53	.49	...	.06	(.03)		1.55	4.84	1.58	.61	.26	(.13)	.01
Oct.	17.39	1.64	.46	...	.12	.00	.90	1.61	3.31	1.47	.81	.76	(.01)	.01
Nov.	18.39	1.41	.97	...	.16	(.19)	.45	1.59	4.32	1.35	.66	.58	.17	.01
Dec.	18.55	1.58	.87	...	.08	(.98)	.47	1.98	3.72	2.33	.66	1.23	.15	.00
Jan.	11.48	.39	1.04	4.70	.20	(.70)	1.28	1.06	1.50	1.78	.48	.19	.05	...
Feb.	20.24	.71	.80[h]	5.38	.22	(1.01)		1.28	2.75	1.25	.58	.53	.16	...
Mar.[b]	20.00	1.01	.74[h]	8.00	.82	(1.00)	1.12	1.18	3.66	1.93	.38	.79	.12	...
Aug.–Mar.														
1936–37[d]	136.19	8.34	5.30	24.10	1.75	(3.91)	5.54	11.47	28.04	13.25	4.64	4.87	(.09)	.10
1935–36	133.53	8.86	6.61	.04	.22	2.16	4.42	10.53	25.73	14.38	5.33	5.35	(.94)	(.44)
Average[e]	143.45	11.67	15.43	5.42	1.22	4.77	6.56	12.29	27.56	16.88	10.25	5.60	1.54	.54

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

Month or period	Poland	Lithuania	Latvia	Estonia	Finland	Greece	Syria, Lebanon	Egypt	Japan	Manchukuo	China	Cuba[i]	South Africa	New Zealand
Aug.	(1.12)	.00	.00	.00	.45	1.54	(.07)	.00	.48	.66	(.31)	.25	.00	.08
Sept.	(.82)	.00	.00	.00	.28	1.55	(.19)	.01	.67	.28	(.28)	.49	.00	.13
Oct.	(.69)	.00	.00	.00	.21	1.79	(.32)	.01	.17	.42	(.13)	.27	.01	.01
Nov.	(.63)	.00	.00	.00	.18	1.63	(.36)	.01	(.21)	.83	(.04)	.39	.01	.02
Dec.	(.53)	.00	.00	.02	.18	1.69	(.49)	.01	.13	.57	(.00)	.47	.00	.02
Jan.	(.70)	.00	.02	.12	.38	1.97	(.23)	...	.56	.41	...	.46	.00	.01
Feb.	(.37)	.00	.08	.00	.33	....	(.02)	...	.43	...	...	.50	...	.00
Mar.[b]	(.40)	.00	.22	.00	.20	....	.00	...	.95	...	...	.36	...	...
Aug.–Mar.														
1936–37[d]	(5.26)	.00	.32	.14	2.21	14.40	(1.68)	.06	3.18	4.00	...	3.19	.03	.27
1935–36	(4.76)	(1.88)	(1.46)	(.07)	2.55	8.61	(.07)	.11	3.06	9.35	3.64	3.33	.05	.66
Average[e]	(1.59)	(.50)	(.19)	.03	2.80	10.60	.17	1.70	4.18	15.64[j]	14.78[k]	2.77	.53	.63

* 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 4.90 million bushels.
[d] Including our estimates for missing monthly data.
[e] Five years ending 1935–36.
[f] Net trade in "commerce général."
[g] Including Luxemburg.
[h] Net trade in "commerce spécial."
[i] Gross imports of flour from unofficial sources.
[j] Three years ending 1935–36.
[k] Four years ending 1935–36.

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

(Million bushels)

Year	Domestic supplies			Domestic utilization				Surplus over domestic use[c]	Net exports, wheat and flour			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)											
1931-32.....	313	937	1,250	474	80	+194	748	502	127[d]	99	28	375
1932-33.....	375	757	1,132	481	81	+156	718	414	36	33	3	378
1933-34.....	378	552	930	435	76	+117	628	302	28	21	7	274
1934-35.....	274	526	800[e]	443	82	+130	655	145	(1)[f]	(1)[f]	0	146
1935-36.....	146	626	772[e]	458	88	+117	663	109	(28)[f]	(24)[f]	(4)[f]	137
1936-37[g].....	137	626	763[e]	460	96	+117	673	90	(25)[f]	...	...	115
1936-37[h].....	137	626	763[e]	460	96	+142	698	65	(25)[f]	(23)[f]	(2)[f]	90
	B. CANADA (AUGUST–JULY)											
1931-32.....	134	321	455	42	37	+37	116	339	207	141	66	132
1932-33.....	132	443	575	44	36	+19	99	476	264	196	68	212
1933-34.....	212	282	494	43	33	+30	106	388	194	133	61	194
1934-35.....	194	276	470	43	32	+27	102	368	165	126	39	203
1935-36.....	203	281	484	43	33	+45	121	363	254	161	93	109
1936-37[g].....	109	229	338	43	35	+25	103	235	200	...	...	35
1936-37[h].....	109	229	338	43	35	+25	103	235	200	156	44	35
	C. AUSTRALIA (AUGUST–JULY)											
1931-32.....	60	191	251	32	16	− 3	45	206	156	103	53	50
1932-33.....	50	214	264	33	16	+10	59	205	150	111	39	55
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	143	200	33	13	+ 4	50	150	103	74	29	47
1936-37[g].....	42	134	176	33	14	+ 9	56	120	90	...	...	30
1936-37[h].....	47	150	197	33	14	+ 5	52	145	110	64	46	35
	D. ARGENTINA (AUGUST–JULY)											
1931-32.....	80	220	300	65	24	+ 6	95	205	140	94	46	65
1932-33.....	65	241	306	65	24	+10	99	207	132	73	59	75
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[g].....	60	250	310	69	22	+ 9	100	210	145	...	...	65
1936-37[h].....	65	248	313	69	22	+ 7	98	215	155	126	29	60

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

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

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

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

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

[e] Not including estimated net imports.

[f] Net imports.

[g] Estimates as of January 1937.

[h] Estimates as of May 1937.

TABLE X.—OCEAN FREIGHTS ON WHEAT TO EUROPE, MONTHLY, 1936–37*

(U.S. cents per bushel)

	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Northern Atlantic[a]	7.5	8.1[b]	8.0	8.0[b]	8.8[b]	8.9	8.9	8.9	9.0[b]
Northern Pacific	13.1	12.6[b]	15.1	16.4[b]	21.4[b]	21.4	21.3	19.8	21.7
India (Karachi)	16.5[b]	17.1[b]	17.5	18.0	23.2[b]	26.3[b]	....	20.0	23.2
La Plata, down river...	13.0	13.7[b]	14.4	14.1	18.9[b]	21.5	16.6	17.0	21.4
Australia[c]	19.4	19.9[b]	20.2	20.6	28.0[b]	28.9	27.0	27.6	33.0

* Averages of Tuesday rates to the United Kingdom, from Broomhall's *Corn Trade News;* for cargoes, except as noted. Dots (...) indicate lack of data.

[a] Parcels: August–November from Montreal; December–April from St. John.

[b] Rates missing for some weeks.

[c] Mean of reported ranges.

TABLE XI.—SELECTED WHEAT PRICES, WEEKLY FROM JANUARY 1937*

(*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.	May	May	Sept.						
Jan. 9	131	130	128	...	...	133	114	138	141	143	167	180	114
16	130	129	127	112	...	134	112	140	140	141	166	168	114
23	126	126	122	108	97	130	110	136	136	138	158	164	112
30	122	123	120	106	95	128	108	133	135	137	...	172	110
Feb. 6	126	126	124	109	98	131	110	136	136	140	...	...	112
13	129	130	129	113	101	136	114	141	144	145	162	202	117
20	126	128	127	112	100	135	115	140	138	143	165	178	116
27	126	128	124	110	100	131	111	135	133	139	156	158	112
Mar. 6	129	131	128	112	104	134	112	138	138	142	152	154	113
13	132	134	131	117	108	136	117	140	138	142	154	206	116
20	137	134	136	122	116	137	121	141	137	140	153	170	117
27	142	139	143	127	126	141	124	145	141	147	148	188	119
Apr. 3	147	141	147	128	130	143	125	146	141	147	...	199	121
10	153	140	147	126	128	141	123	144	144	145	170	164	122
17	141	131	138	120	119	135	119	138	136	142	155	161	120
24	141	129	135	119	123	133	117	136	137	...	159	152	119
May 1	136	124	130	117	122	129	115	133	134	136	150	125	117
8	140	129	132	119	...	128	116	132	136	136	142	128	...
15	139	129	129	117	...	123	115	127	...	...	...	...	...

Week ending	British parcels		Liverpool (Tuesday prices)				European domestic				Winnipeg		Buenos Aires 80-kilo[f]
	U.S. cents	Gold cents	No. 1 Man.	No. 3 Man.[b]	Arg., Rosafé[c]	Australian[d]	Great Britain	France[e]	Germany[e]	Italy[e]	Wtd. average	No. 3 Man.	
Jan. 9	136	81	154	147	133	141	128	183	228	178	127	124	100
16	132	78	155	146	133	141	130	183	228	178	126	123	98
23	132	79	150	141	125	137	130	183	228	178	122	118	97
30	122	73	145	137	123	133	127	183	228	178	119	116	96
Feb. 6	126	75	143	134	120	129	121	184	228	178	123	120	98
13	125	74	148[d]	142	125	138	118	184	228	178	127	125	101
20	131	78	148[d]	139	124	133	119	184	228	178	126	124	101
27	122	73	146[d]	136	123	132	119	184	228	178	123	118	100
Mar. 6	129	77	146	137	125	134	117	181	228	178	125	122	104
13	133	79	149[d]	139	128	135	117	184	228	178	129	125	109
20	139	83	154	147	137	140	118	184	228	178	134	131	116
27	146	87	159	153	140	145	120	184	228	178	142	138	126
Apr. 3	153	91	169	162	162	150	124	186	228	178	146	143	132
10	162	96	170	163	158	153	131	181	228	178	145	142	128
17	150	89	163	155	155	152	134	181	228	178	134	132	119
24	148	88	156	148	144	144	135	179	228	178	132	128	...
May 1	141	84	147	139	141	139	132	183	228	...	128	124	...
8	...	..	150	143	142	141	...	183	228	...	129	125	...

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

[a] July future through Mar. 13.

[b] Vancouver to London.

[c] Duty paid.

[d] To London.

[e] Fixed prices; irregularities in French prices due to fluctuations in the exchange rate.

[f] Dec. 19, 101; Dec. 26, 102; Jan. 2, 100.

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TEXT

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