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WORLD WHEAT SURVEY AND OUTLOOK JANUARY 1937

STRIKINGLY small world wheat supplies characterize the crop year 1936–37. These supplies are the smallest since 1926–27, and some 300 million bushels below those of 1935–36. Supplies in importing Europe now appear smaller, those in exporting countries larger, than seemed probable in September.

International shipments of wheat in August–December were larger than last year, in reflection of the heavier demand in Europe, particularly in Italy. But the increase in trade was moderate as compared with the reduction of supplies in importing countries. High wheat prices, relatively lower prices for other grains, and the failure of most countries to reduce effective trade barriers tended to restrain imports and to curtail wheat utilization. Exports of Canadian wheat to the United States were about the same as last year; but shipments to other ex-European countries were notably small.

Wheat futures prices, dominated by news of import purchases, both current and prospective, continued to advance sharply during September–December. The net advance was the largest for these months in eleven years. As of early January, British wheat parcels prices were the highest since 1929–30 and nearly three times as high as at their postwar low in 1932–33. A downward tendency of futures prices, in progress since late December, may continue somewhat further, but appears likely to be moderate. Recent prices seem not excessive, and perhaps too low, in view of the international supply position.

World net exports of wheat, which were reported at 525 million bushels in 1935–36, this year seem likely to approximate 560 million. Total year-end stocks will probably be reduced to about 520 million bushels, less than half of the estimated peak carryover of 1934, and the lowest since 1925.

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WORLD WHEAT SURVEY AND OUTLOOK JANUARY 1937

Tightness of the supply position has been reflected and emphasized in all phases of the wheat situation since mid-September. For the time being, the world wheat surplus of recent years is a thing of the past.

Crop estimates and revisions published in the past four months have confirmed earlier views that the 1936 world crop ex-Russia was appreciably smaller than either of the two small crops that preceded it. With initial stocks of old-crop wheat also materially reduced, and with Russia practically out of the export market, total wheat supplies for 1936–37 in the world ex-Russia now appear to be about 300 million bushels less than last year and the smallest since 1926–27. Reflecting reduced total supplies, aggregate stocks in visible positions increased but slightly during the fall months, and subsequently declined to a level below the average for corresponding dates in the three pre-surplus years ending with 1927–28.

CONTENTS

The wheat supplies of 1936–37 are so distributed as to favor a larger volume of international trade than in either of the two preceding years. The deficiency in importing Europe is much greater this year, and in the United States inadequate supplies of hard red spring and durum wheats bid fair to result in net imports about as large as in 1935–36. World wheat exports (net) through November barely reflected the anticipated heavier demand; but shipments since December 1 have been considerably larger this year, and by the end of January total net exports will presumably also register a substantial increase of trade as compared with both 1934–35 and 1935–36. Heavier European imports have more than offset reduced takings by ex-European countries other than the United States.

Wheat prices in leading futures markets were dominated during September–December by market news of import purchases and by changing ideas as to the size of the small margin between import requirements and export surpluses. Largely because of persistent import buying by European countries, especially Italy, most traders came to accept the view that this margin is smaller than had been anticipated in August and early September. Under these influences, wheat prices at Liverpool and in North American markets rose 30–45 cents before the end of December, reaching levels higher than had been witnessed for seven years. Early in January, British wheat parcels prices were almost three times as high as at their postwar low in the winter of 1932–33.

World net exports of wheat in 1936–37 now seem likely to total 560 million bushels—40 million more than we suggested in September. The aggregate crop of European importing countries now appears smaller, and the Italian government has recently demonstrated an ability and willingness to finance imports larger than we earlier anticipated. Net imports of European net-importing countries may well reach the highest level in four years.

In spite of increased imports, wheat utilization in Europe ex-Danube will presumably be lower this year than last. Less wheat will be used for food in Spain and elsewhere, and less will be fed to poultry and other livestock in the British Isles and some continental countries. Domestic utilization of wheat may be somewhat heavier this year in the United States, the Danube basin, and perhaps a few other areas. But such increases will not offset the aggregate reduction in Europe ex-Danube, French North Africa, Canada, India, and probably the Near East and Far East. Total disappearance of wheat in the world ex-Russia may be 75–125 million bushels less than in any of the four preceding years.

World wheat stocks as of August 1, 1937, now seem likely to total only about 520 million bushels. At this figure year-end stocks would be 630 million bushels below their peak in 1934, and lower than in any year since 1925.

Despite the extent of the price advance which culminated in December, recent prices of wheat futures appear a conservative reflection of indicated tightness in the international supply position. Price movements of near futures during January–May will depend largely on developing evidence of the degree of this tightness and, after March, on changing prospects for the next harvest. Among the possibilities, those that would lead to higher prices by April than at present (January 19) appear more likely than those that would lead to sustained lower prices. The Winnipeg May future appears in the strongest position, while new-crop futures may be relatively weaker than old-crop during the next two months at least.

Wheat Supplies

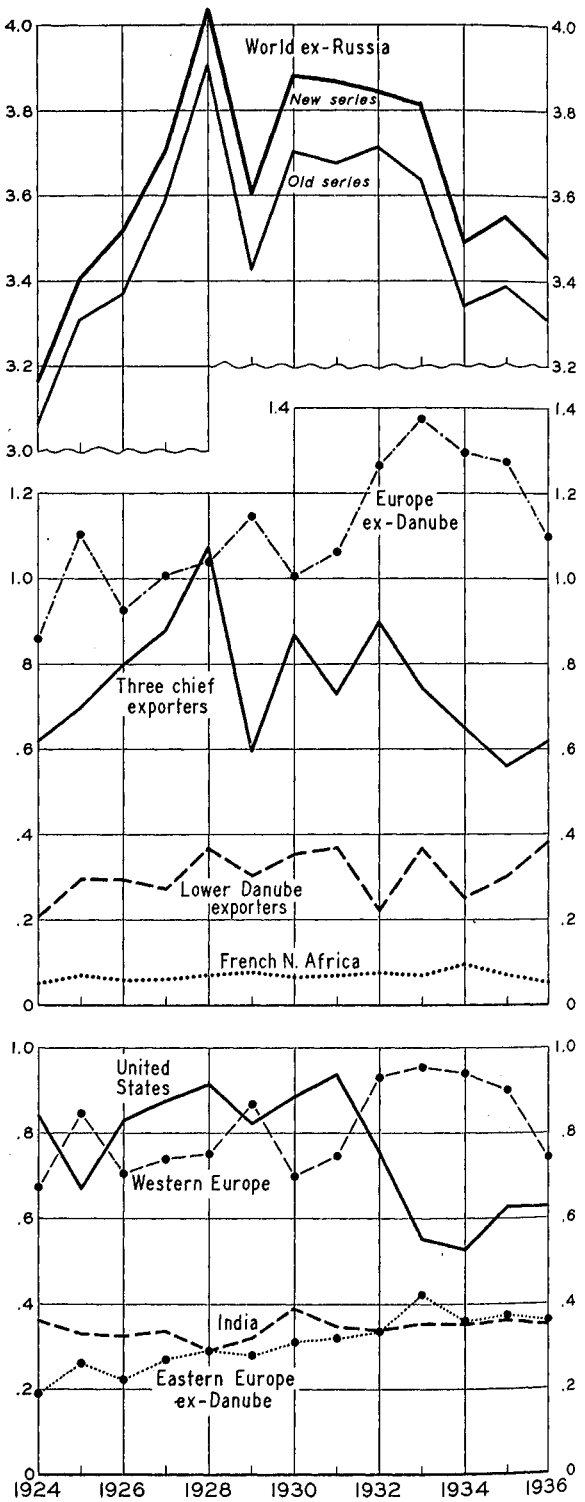
Current estimates, like those of mid-September, suggest a world wheat crop ex-Russia roughly 80–100 million bushels smaller than that of 1935, and the smallest since 1925. The total outturn of exporting countries, specifically those in Europe and the Southern Hemisphere, now appears larger, and the crop of importing Europe smaller, than four months ago (Table I). Moreover, it no longer seems reasonable to allow for future upward revision of the standing crop estimate for Europe ex-Danube.

Total supplies of wheat for the world ex-Russia are clearly the smallest since 1926–27; and per capita supplies are the smallest in postwar years except perhaps in 1920–21.

Size and distribution of 1936 crop.—For the third successive year, wheat production in the world ex-Russia was far below normal in 1936. This is reflected in Chart 1 in both our old and our more inclusive new series of "world" production.[1] Again this year the reduced world

Chart 1.—Principal Wheat Crops, 1924–36*

(*Billion bushels*)



* See Tables I and II. Eastern Europe includes Germany.

[1] The new series includes production data for all countries in the old series and also for Turkey, Syria and Lebanon, Palestine, Cyprus, Manchukuo, Brazil, and Peru. The USSR, China, Iran, and Iraq are omitted from both series.

outturn is primarily attributable to unfavorable weather in various important wheat-producing regions. This resulted in smaller plantings than had been intended, heavy abandonment of sown acreage, and a relatively low average yield per harvested acre.

As in 1934 and 1935, production of wheat in the three chief exporting countries and the United States was far below average in 1936. In contrast with the two earlier years, however, crops in western Europe also were strikingly reduced, and this reduction was only partially offset by enlarged outturn in the Danube basin.

The distribution of recent world crops by countries is shown in Table II. In 1936 distinctly small crops were harvested in the North American spring-wheat region, in French North Africa, and in France, Italy, Spain, and Portugal. Except for the crop of 1934, the outturn of spring wheat in the United States was the lowest on record (beginning 1909); Canada's crop was the smallest since 1920; and in seventeen postwar years crops as small or smaller had been harvested only once before in Spain and French Morocco, twice before in Portugal, four times in Tunis, and five times in France. The small crops in the North American spring-wheat belt and in the western Mediterranean countries resulted in a striking deficiency of durum wheat.

Argentina, which in 1935 harvested her smallest postwar crop, this year secured one roughly 100 million bushels larger—an outturn about of average size. Australia's crop, on the other hand, was a little smaller this year than last and substantially below the average for 1930–34.

Few countries obtained record crops in 1936. Among these, the most important was Yugoslavia; the rest, including the Irish Free State, Norway, and Finland, were all small producers. More significant from a world wheat standpoint is the fact that all four of the Danube exporting countries harvested relatively large crops; and so also did Poland, Netherlands, and Japan.

Total wheat supplies. — In recent years "world" wheat crops have been supplemented by large carryovers, and on several occasions (notably 1930–31 and 1931–32) by sizable net exports from the USSR. Under such conditions, data on total wheat supplies and their distribution often suggested a very different outlook for trade and prices than did the less inclusive data on crops.

This year, however, initial stocks of wheat in the world ex-Russia were strikingly below their recent high levels: they totaled about 180 million bushels less than last year and 425 million less than at their peak in 1934. Moreover, Russian exports will presumably be insignificant this year, not only in reflection of reduced domestic crops of bread grain,[1] but also because in Russia economic incentives to export are now less strong than formerly. Consequently, the short "world" crop of 1936 is directly reflected in small total wheat supplies for the world ex-Russia—smaller, indeed, than in any year since 1926–27. Comparative data are shown below, in million bushels:

August–July	Initial stocks	Crop	USSR exports	Total supplies	Disappearance
1923–24	551	3,548	22	4,121	3,439
1924–25	682	3,165	..[a]	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	..[a]	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	3,813	34	4,930	3,781
1934–35	1,149	3,490	2	4,641	3,736
1935–36	905	3,554	29	4,488	3,766
1936–37	722	3,457	1[b]	4,180	3,660

[a] Net imports.
[b] Forecast, see p. 254.

As compared with the four preceding years, crops plus carryovers were substantially lower in 1936–37 in all important wheat-producing regions except the Danube basin, where the supplies were almost as large as in 1931–32 and otherwise the largest on record.

Although Argentina now appears to have about 80 million bushels more wheat available this year than last, the total for the three

[1] No official estimates of the Russian crops of 1936 have yet appeared. However, it is reasonably clear that the crops of spring wheat and rye were small, while that of winter wheat was fair. Hence, the total bread-grain crop was probably distinctly below average.

chief exporting countries (Canada, Australia, and Argentina) is practically 75 million bushels smaller. Supplies in the exporting countries of northern Africa and expected exports from Russia show an additional decrease of 55 million bushels. These reductions are not fully offset by an aggregate increase of 95 million bushels in the Danube basin and in initial stocks of Canadian wheat in bond in the United States. However, the net reduction of supplies in these exporting countries is only about 35 million bushels, whereas in the general importing area of Europe ex-Danube the reduction is approximately 225 million.[1] The United States, which ranked as a net importer in 1935–36 and will again so rank in 1936–37, has practically the same amount of domestic wheat available from crop and carryover this year as last.

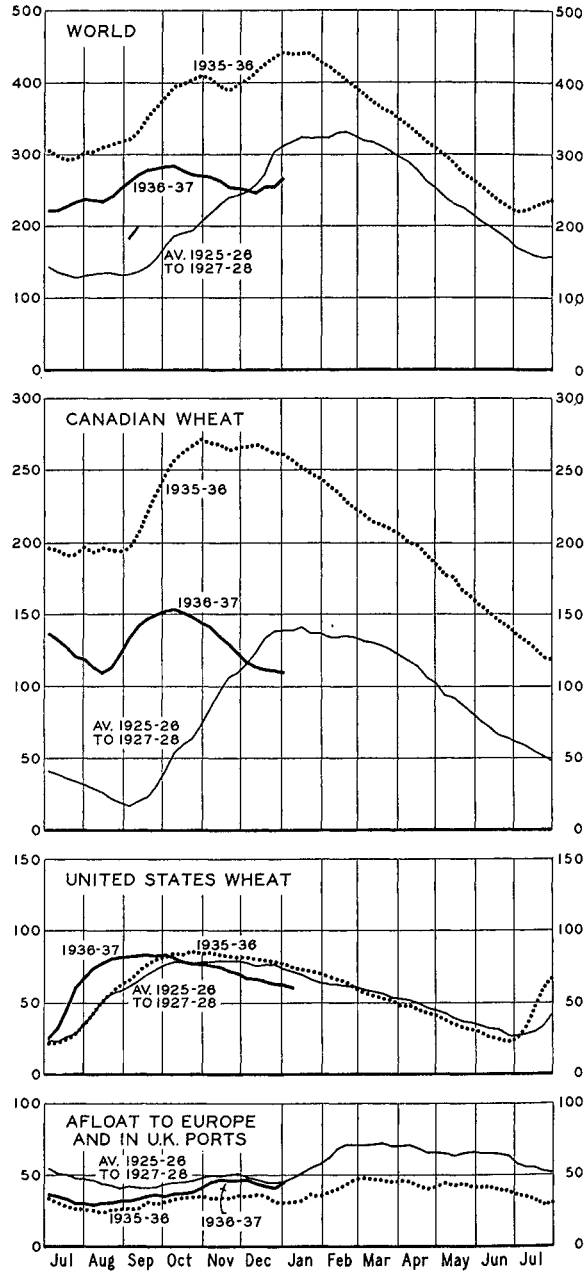
Visible supplies and marketings.—The level and course of "world" visible supplies of wheat since August 1 (Chart 2) has roughly reflected the shortage in total supplies for 1936–37. Not only have stocks of wheat in visible positions been far below their levels in other recent years, but since early December they have even run below the fairly "normal" average for 1925–28.

The unusual decline of world visibles after mid-October was due mainly to early termination of rapid marketing from a small crop in Canada. Secondary factors were a somewhat similar early reduction of marketings in the United States and relatively heavy absorption of Canadian wheat by European importing countries and the United States.

In Canada, "rapid marketing"[2] of wheat

CHART 2.—VISIBLE WHEAT SUPPLIES, WEEKLY FROM JULY 1936, WITH COMPARISONS*

(Million bushels)



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

[1] Crops plus August 1 stocks for various areas may be appraised as follows, in million bushels:

August–July	Three chief exporters[a]	Lower Danube	French North Africa[b]	Europe ex-Danube	United States[c]
1931–32	1,006	427	82	1,246	1,250
1932–33	1,145	271	81	1,449	1,132
1933–34	1,087	394	77	1,608	930
1934–35	1,047	303	103	1,620	800
1935–36	911	322	88	1,571	772
1936–37	825	407	61	1,349	763

[a] Canada, Argentina, and Australia. For details by countries see Table IX.

[b] Morocco, Algeria, Tunis.

[c] Through 1933–34 the United States was a net-exporting country; since then she has ranked as a net importer.

[2] For Canada this term is here used in a technical sense to refer to weekly country-elevator receipts and platform loadings in the Prairie Provinces in excess of 3 per cent of the total (or estimated total) deliveries during the season plus the farm carryover at the end of the season. The basis for this definition, and the background for various statements made here with respect to Canadian wheat marketing in 1936–37, are given in Holbrook Working, "The Timing of Wheat Marketing in Western Canada," WHEAT STUDIES, October 1936, Vol. XIII, No. 2.

began this year in the week following August 7. This date, the earliest on record for beginning of rapid marketing, primarily reflected an unusually early wheat harvest in western Canada. If total farm deliveries of wheat in the Prairie Provinces prove this year to approximate 190 million bushels,[1] the dates on which 25 per cent and 50 per cent of the deliveries had been made were also the earliest on record. Moreover, the end of the rapid-marketing movement was in the week ending October 16—practically two weeks earlier than in any other postwar year. Early termination of rapid marketing and the low level of deliveries since mid-October may indicate a tendency for Canadian farmers to hold back a relatively large proportion of their wheat in anticipation of higher prices later in the crop year.[2]

Only in a few other countries does there appear to have been a tendency for farmers to market their wheat less freely than usual this year. The statistical evidence bearing on this point, however, is far from adequate or reliable. As of January 1, stocks on farms in the United States represented only 22 per cent of the preceding crop plus inward farm carry-over minus estimated seed requirements. This percentage is low as compared with most past years and suggests that farmers in this country were willing sellers of wheat at the prices prevailing in July–December.

In England and Wales, farmers' deliveries of wheat through December represented a smaller proportion of the crop minus seed than in three of the four preceding years: the crop was harvested wet and is of poorer quality, but it seems possible that some farmers have held more wheat than usual for late marketing.[3] In Germany, where farmers have been required to market their wheat according to a definite schedule, farm stocks on November 30, 1936, represented a smaller percentage of the crop minus seed than on the average in the four preceding years. This evidence does not point to the adoption of a holding policy by German farmers, but it may reflect unusually heavy feeding of wheat on farms during August–November 1936. In any case, the German government evinced dissatisfaction with the situation by establishing more stringent marketing regulations, effective December 1, which provided that 60 per cent of the required wheat deliveries should be made by December 31, 80 per cent by January 31, and 100 per cent by February 28.[4]

In France, Italy, and several other countries that have devalued their currencies since late September, wheat producers are reported by private observers to be dissatisfied with current prices and to be holding back their wheat in hopes that the fixed prices will be raised later in the year. For these countries statistics of stocks and deliveries are not available, and we have practically no basis for passing judgment on such reports. However, it seems reasonable to believe that, as a result of early postwar experiences, many European peasants have an exaggerated idea of the immediate price-stimulating influence of recent currency developments, and that in spite of limited financial resources they may have been able to postpone the marketing of a significantly larger proportion of their wheat crops than usual. We doubt that the actual volume of wheat involved is particularly large, perhaps especially in Italy where farmers are required to deliver their wheat to government agencies within 30 days after threshing. But even in Italy slower domestic wheat marketings may account in some measure for

[1] Working's estimate in October, *op. cit.*, p. 35. The Dominion Bureau of Statistics has recently suggested that deliveries for the season may be only about 166 million bushels (*Monthly Review of the Wheat Situation*, December 1936, p. 2).

[2] If deliveries for the season are to reach 190 million bushels, farm marketings after the end of January must approximate 25 per cent of the season's total —about the same percentage as in the depression years of 1931–32 to 1934–35. It seems more reasonable to expect only about 15 per cent of the total to remain for marketing after the end of January. On this reasoning, total deliveries in line with the estimate of the Dominion Bureau cited in the previous footnote are indicated.

[3] In early January, English domestic wheat was selling at around $1.17 per bushel, as compared with the "standard price" of $1.34 (10*s.* per cwt.) and the realized average return of about $1.21 per bushel in 1935–36.

[4] To repay producers for marketing earlier than usual, the fixed-price system was modified so that the December price would be 6 marks per ton higher than originally announced, this price to be maintained unchanged through July.

the active buying of import wheat in recent weeks.

UTILIZATION

In years such as 1936–37 when world wheat supplies are notably short, more than the usual importance attaches to appraisal of the prospective total utilization of wheat for food, feed, and seed. Annual disappearance in the world ex-Russia has varied over the past decade between 3,540 and 3,940 million bushels (see p. 235). This year, again, disappearance will presumably fall within this range. But world wheat supplies less an average predepression carryover (600 million bushels) apparently approximate only about 3,580 million bushels. Hence, world wheat markets will continue to be concerned with the question how far wheat disappearance in 1936–37 is likely to fall below the middle of the range for the past decade. Of importance, too, are questions concerning the quantities of wheat that various governments may take special measures to hold as "necessary stocks." Facts upon which to base reliable answers to these questions are still lacking; but certain developments during the current crop year afford some basis for partial answers for a few important wheat-consuming countries.

North America, Argentina, Australia.—In the United States, mill grindings of wheat for domestic consumption and flour stocks seem likely to be about the same as or only slightly larger than in 1935–36 (Table IX). Economic recovery and an increased population are forces operating in the direction of increased grindings. The better quality of the wheat crop of 1936, and higher prices for old-crop as compared with new-crop wheat (which will probably tend slightly to reduce flour stocks as of July 1, 1937), are forces that presumably will operate in the opposite direction. In July–December 1936, flour milled for domestic retention was 2,230 thousand barrels more than in the same period of 1935 (Table V). The corresponding difference for wheat milled was 10 million bushels. This increase reflects primarily a greater accumulation of flour stocks during July–December this season than last. Net mill grindings in January–June 1937 are likely to fall below those of the corresponding months in 1936 by 8 million or perhaps 10 million bushels.

Utilization of wheat for feed on farms in the United States may be about as heavy as in 1935–36. This year there is less unmillable wheat that must be fed; but feed supplies are shorter, and feed grain prices have been substantially higher relative to wheat prices than in 1935–36. In fact, in several important states, farm prices of corn have averaged higher per bushel than prices of wheat over the past few months. Imports of Canadian feed wheat will presumably be smaller this year, but commercial feeding in general will probably be maintained at a fairly high level.

In view of these considerations, and since the amount of wheat used for seed in the United States will doubtless be larger in 1936–37 than in 1935–36, we count on a small increase (around 10 million bushels) in total wheat utilization in this country.

In Canada, on the other hand, despite some possible increase in seed use of wheat, total utilization will presumably be reduced. The higher quality of the Canadian crop of 1936 warrants the expectation that less merchantable wheat will be fed on farms where grown, less classed as unmerchantable, and perhaps less lost in cleaning this year. The Dominion Bureau of Statistics of Canada tentatively forecasts domestic utilization of wheat in 1936–37 at 101 million bushels—13 million less than in 1935–36.

Neither significant reduction nor significant increase is reasonably in prospect in Argentina or Australia (Table IX). In quality, the Australian crop is apparently somewhat below last year's exceptionally high standard, but scarcely enough to increase utilization appreciably. Nor is the somewhat better quality of the Argentine crop likely to influence consumption in that country.

In these four countries combined, wheat utilization seems likely to be approximately the same as in 1935–36.

Europe.—In contrast, a fairly large reduction in utilization of wheat both for food and for feed is to be expected this year in importing Europe. Reduced domestic crops and carryovers and the higher level of international wheat prices will operate strongly in

this direction, presumably more than offsetting the effects of improvement in economic conditions, lower quality of the 1936 wheat crops in western Europe, and some relaxation of restrictions on wheat imports.

Where import purchases are in the hands of a governmental monopoly, and domestic trade and prices are thoroughly regulated, such reductions in tariff duties as those made in Italy and Germany[1] do not constitute reductions in effective barriers to imports. Significance attaches rather to increased purchases of foreign grain, under trade agreements or otherwise, and to changes in milling quotas, internal prices, and domestic regulations.

Several countries have concluded trade agreements with Danubian exporting countries, and these agreements will doubtless be followed by some reductions in domestic milling quotas later in the year. Italy has made contracts to purchase sizable quantities of wheat not only from the Danube countries, but from Canada, Argentina, and Australia as well.

The German government is reported to have made a trade agreement with Yugoslavia involving the purchase of 3.7 million bushels of wheat, and a trade agreement with Canada which provides that Germany will use for the purchase of Canadian wheat 35 per cent of the foreign exchange accruing from German exports to Canada. Except for these and one or two other minor agreements, the German government has devoted its efforts mainly to contracting domestic consumption of wheat in 1936–37. Regulations have been issued decreasing the number of types of wheat flour (in effect increasing the average rate of extraction), prohibiting the use of bread grains in the manufacture of alcohol and coffee substitutes, and prohibiting bakers in Berlin from selling bread less than a day old.[2] In a vigorous campaign of propaganda, the government has stressed the alleged superiority of rye bread over wheat bread, and has urged farmers not to use bread grains for feeding livestock. Furthermore, it is possible, but not definitely established, that the government has used its broad powers over wheat prices and marketings to *compel* a reduction in feed use of wheat this year.[3]

France, which is also operating a virtual wheat monopoly, has taken two slight steps in the direction of freer trade: (1) since early November imports of foreign wheat have been permitted against *prior* export of specified equivalent or larger quantities of domestic wheat; and (2) from January 1 mills have been allowed to use 50 per cent of foreign durum wheat in the manufacture of certain types of flour.

In Holland, taxes on flour made wholly of foreign wheat (*a*) within Holland and (*b*) in foreign countries have been lowered from 5 and 7 florins per 100 kilos, respectively, in August–January 1935–36 to 3.5 and 5.5 florins this year; but the general domestic milling quota remains unchanged at 35 per cent. Belgium appears to be the only European country that has thus far reduced its domestic milling quota significantly: this year Belgian millers have been required to grind only 5 per cent of domestic wheat, as contrasted with 15–20 per cent in the same period of 1935–36.

Among other countries of Europe ex-Danube, Greece, Spain, and the Irish Free State have definitely tightened restrictions on wheat imports this year. Greece and Spain have increased their tariff duties on wheat, while the Irish Free State has raised the milling quota for domestic wheat to 33 1/3 per cent, as contrasted with 25 per cent in the same period of 1935–36.

Further relaxation rather than tightening of controls over wheat imports appears to be

[1] The Italian import duty on wheat was reduced from 75 pre-devaluation lire per quintal (about $1.60 per bushel) to 47 and later 32 devalued lire (around $.70 and $.46 per bushel, respectively) in October and November 1936. The German wheat tariff, applicable to wheat imported through the government agency, was decreased, effective January 1, 1937, from 8.5 to 1.0 Rm. per quintal ($.93 to $.11 per bushel).

[2] As reported in the *Daily Trade Bulletin* (Chicago), Dec. 22, 1936, this regulation was issued because more slices can be cut from an old loaf of bread, and because stale bread is unlikely to be consumed in as large quantities as fresh bread.

[3] The new wheat-marketing and price policy instituted by the government on November 25 (p. 237) may have been designed partly to prevent even normal feeding of wheat during the winter and early spring months.

in prospect in several European importing countries during the latter half of the crop year. France, particularly, may be expected to take steps to admit larger imports under governmental supervision. But despite the more favorable trade policies adopted or likely to be adopted, total *statistical utilization* of wheat in Europe ex-Danube will presumably be around 70 million bushels smaller this year than last, though decline in the actual use of wheat for food, feed, and seed may not run so large.

The largest reductions in wheat utilization will presumably occur in France, Spain, and Germany, but in France part of the reduction may be purely statistical (see p. 251). These countries and also Italy have considerably smaller supplies of domestic wheat this year; and at least Germany and Italy are reported to have been favored with larger crops of other grains and potatoes. The higher international wheat prices of 1936–37 are not reflected in the fixed prices in Germany; and in Italy the price of wheat has been increased less than prices of some competing foods. However, in these two countries and in France there is such strict regimentation of wheat marketings, trade, and milling that governmental policies will largely determine to what extent utilization of wheat will be contracted.

In the United Kingdom, and several other countries of northwestern Europe, the higher level of wheat prices and changed relationships between wheat prices and prices of feed grains[1] will presumably operate to curtail feeding of wheat to poultry and other livestock.

In the Danube basin, wheat supplies are so abundant this year that consumption will presumably be increased in spite of high international wheat prices and large crops of corn and other grains. We venture the guess that total wheat utilization in this area will be something like 15 million bushels heavier in 1936–37 than in 1935–36, the increase going largely into food channels.

We summarize below, in million bushels, our views of the approximate statistical utilization of wheat in Europe in 1936–37 as compared with 1935–36.

Country	1935–36[a]	Prospective 1936–37
British Isles	294	290
France	326	284[b]
Italy	282	282
Spain, Portugal	183	167
Other western Europe[c]	174	172
Germany	196	186
Czechoslovakia, Austria	74	78
Poland, Baltic States	95	95
Greece	41	42
Europe ex-Danube	1,665	1,596
Lower Danube	272	287

[a] Data summarized from Table XXXI in our recent "Review of the Crop Year," WHEAT STUDIES, December 1936, XIII, 229.

[b] Indicated statistical reduction probably exceeds the true prospects (see p. 251).

[c] Including Switzerland, Belgium, the Netherlands, Denmark, Norway, and Sweden.

Other countries. — Notably small wheat crops in 1936 in French North Africa will presumably result in lowered consumption in that region. Morocco, whose crop was relatively the smallest, prohibited all exports of soft and durum wheats, flour, and semolina early in July; and later Tunis ruled that exports of hard wheat and its derivatives could be made only with the approval of the Director General of Finance. Although these two countries will certainly export less wheat in 1936–37 than in 1935–36 (they may even rank as small net importers), and Algeria will probably also export somewhat less, domestic wheat consumption may be expected to fall below the moderate level of 1935–36 by perhaps 5–10 million bushels.

In India and Japan, not small crops of wheat

[1] In August–November 1936, prices of barley, oats, and rye were lower in relation to comparable prices of wheat than in any of the three preceding years. This is apparent from the following tabulation in which prices of domestic feed grains and rye are expressed as percentage of corresponding prices of domestic wheat and British import prices of corn are shown as percentages of British import prices of wheat.

Aug.–Nov.	United Kingdom			Denmark			Argentina	
	Barley	Oats	Import corn	Barley	Oats	Rye	Corn	Barley
1933.....	201.8	109.4	68.9	113.5[a]	114.0[a]	85.2[b]	68.8	64.1
1934.....	191.2	130.4	79.2	113.2	107.4	101.8	100.6	107.5
1935.....	161.7	110.8	59.6	92.9	93.4	93.2	55.5	60.3
1936.....	117.8	84.6	60.5	87.8[c]	80.4[c]	76.0[c]	53.2[d]	53.4[d]

[a] October–November only.
[b] November only.
[c] September–November.
[d] August–October.

but high wheat prices and large crops of rice and other foodstuffs are tending to reduce wheat utilization by around 20–25 million bushels in the aggregate. In India, the export price of wheat has increased so rapidly in the past six months, and prices of rice and native foods have recently been so much lower than the price of wheat, that many families have presumably reduced their wheat consumption in favor of cheaper products. In reflection of this tendency, wheat exports from India have recently been unusually large in relation to the size of the crop from which they were drawn.

Egypt, where a fairly large wheat crop was harvested in 1936, may be expected to expand utilization slightly in 1936–37, as compared with the past two years of notably restricted consumption. Most "other" countries of the world ex-Russia, on the other hand, had smaller harvests of wheat in 1936 than in 1935, and with higher wheat prices their aggregate consumption may be reduced by around 20 million bushels.

Total utilization.—To summarize, total utilization of wheat in the United States and the three chief exporting countries promises to be about the same in 1936–37 as in 1935–36, a small increase in the United States practically offsetting an anticipated decrease in Canada. In Europe, there may be a net reduction of around 55 million bushels, in spite of substantial expansion in the Danube basin. India, Japan, and northern Africa (including Egypt) may be responsible for a further net decrease from 1935–36 of around 30 million; and other countries may bring the total reduction in wheat disappearance in the world ex-Russia to about 100 million bushels. This rounded figure is to be regarded as a rough, tentative estimate, subject to perhaps fairly large revision.

Included in our estimates of wheat disappearance in the "world ex-Russia" are variable quantities of wheat shipped to China and other areas that are outside the world ex-Russia as here defined. China has this year harvested unusually large domestic food crops, and in any case would be inclined to reduce imports of wheat at current high prices. Shipments of wheat from the world ex-Russia to China, and also in total, are therefore likely to be even smaller in 1936–37 than in 1935–36 when they were already relatively low.

INTERNATIONAL TRADE

The outstanding features of international trade in wheat since August 1 have been the good import demand of continental European countries, particularly Italy, and the heavy demand for Canadian wheat in the United States. Ex-European countries other than the United States have imported less wheat than in the corresponding period of any year since 1924–25.

As had been generally anticipated, Canada was the principal source of world wheat shipments in August–December. The Danube exporting countries, however, supplied about a fifth of the total shipments during this period —an unprecedented proportion; and Indian exports, though small in the aggregate, were the largest since 1924–25.

Volume and course of trade.—Reflecting the greater deficiency of wheat supplies in European importing countries this year, and the unusual distribution of the United States crop, world wheat shipments in August–December were heavier than in the same months in any of the three preceding years. Except as compared with last year, however, the increase in shipments went wholly to the United States and to swell stocks of wheat afloat to Europe. This is suggested by the following tabulation of Broomhall's shipments classified by primary destinations, in million bushels:

Aug.-Dec. (21 weeks)	Total	To Europe		To ex-Europe		
		Reported	Adjusted[a]	Total	U.S.	Others
1931.....	322	245	253	76	..	76
1932.....	236	182	177	54	..	54
1933.....	210	166	177	44	..	44
1934[b].....	210[c]	161	170	49[c]	..[c]	49
1935.....	207	148	145	59	19	40
1936.....	226	175	160	51[d]	19	34

[a] By subtracting from the reported figures any increase in stocks afloat or by adding any decrease.

[b] Shipments for 22 weeks minus those in the first week.

[c] Too low by around 5 million bushels. In 1934–35 Broomhall first reported Canadian shipments to the United States in mid-February when he added into his cumulative total 8.0 million bushels shipped in preceding weeks.

[d] Not equal to the sum of the two following columns, which are from a different table in Broomhall's *Corn Trade News*. The difference is due to the method of reporting shipments from North America to ex-Europe. In the "total" here reported, Broomhall has attempted to balance shipments of wheat from the United States against shipments of Canadian wheat to the United States.

Although reported shipments to Europe were the largest since 1932, these shipments adjusted for change in stocks afloat to Europe (August 1 to January 1) were larger only than in 1935; otherwise they were the smallest on record in postwar years. Total shipments to ex-Europe were of moderate size, but those to ex-European countries other than the United States were the smallest since 1924.

Net-export data, fairly complete only through November, indicate that in the first third of 1936–37 total net exports were about the same size as last year and a little larger than in the corresponding periods of 1933–34 and 1934–35. But when these figures are adjusted for changes in stocks of Canadian wheat in the United States, of United States wheat in Canada, and of wheat on ocean passage to Europe, there appears to have been some slight increase this year over 1934 and 1935 and some slight reduction as compared with 1933. However, it is the generally similar level of adjusted net exports in all four of these years that stands out as the principal feature of the following tabulation, in million bushels:

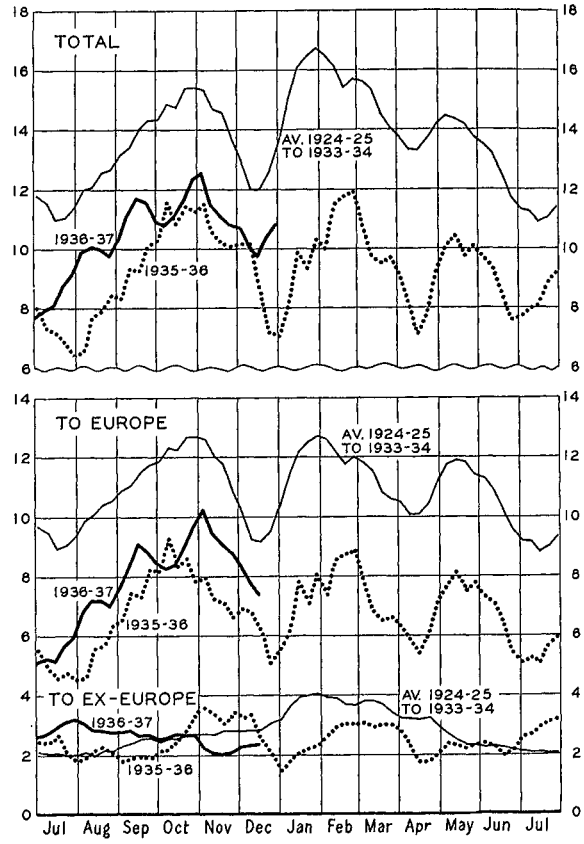
Aug.–Nov.	Reported net exports	Change in stocks[a]	Adjusted net exports
1931	311	+16	295
1932	210	+10	200
1933	196	+ 2	194
1934	198	+14	184
1935	214	+32	182
1936	213[b]	+23	190

[a] Afloat to Europe, United States wheat in Canada, and Canadian wheat in the United States.
[b] Partly estimated; see Table VIII.

The weekly course of reported world wheat shipments through early January (Chart 3) was much like the average course, except with respect to level, smoothness, and the December slump. On three occasions (early August, early September, late October and early November) world shipments increased sharply, then temporarily sagged. The spurts in trade in August and September were associated with sharp advances in wheat prices at Liverpool (Chart 5, p. 246), but the October–November increase in world exports was coincident with declining prices. Apparently expansion of trade at this later date mainly represented a reaction from the preceding slump, which was in part attributable to uncertainties in connection with currency developments in western Europe. Devaluation of the currencies of the former gold-bloc countries, beginning late in September, led to disputes between exporters and importers as to terms of payment on contracts not yet fulfilled, and caused speculation as to future currency changes in other countries (particularly Czechoslovakia and Poland). These developments temporarily retarded the flow of wheat in international trade. When the principal uncertainties were removed or forgotten, world wheat shipments again increased, and presumably by more than they would have if retardation had not occurred in the preceding period. Moreover, although there was a sub-

CHART 3.—SHIPMENTS OF WHEAT AND FLOUR, WEEKLY FROM JULY 1936, WITH COMPARISONS*

(Million bushels; 3-week moving average)



* See Table VI.

sequent decline in trade in November–December, shipments to Europe and in total fell off less sharply than usual in these weeks. At the same time, heavy buying for deferred shipment was reported, such as has been uncommon in recent years of burdensome surplus.

Imports.—With official trade data entirely lacking this year for Italy, and complete for other leading importing countries only through November (Table VII), details of the distribution of world wheat shipments through early January are more or less obscure. The available data, however, reveal several outstanding features of the import trade thus far in 1936–37.

In spite of reduced domestic supplies, European net-importing countries exclusive of Italy actually imported (net) less wheat in the first third of 1936–37 than in the corresponding period of any other recent year; and even the increased takings of Italy probably did not raise the total significantly above the relatively low level of August–November 1934 or 1935. As of December 1 and January 1, however, stocks of wheat afloat to Europe were substantially larger this year. This, together with larger shipments to Europe in recent weeks, suggests relatively heavier European imports in December and January. Indeed, it seems practically certain that cumulative import data through January will reflect at least part of the anticipated increase in European takings in 1936–37.

Italian trade data, if available, would presumably show a larger increase this year than the import figures for any other country. Nevertheless, the net takings of Italy thus far probably have not been large enough to permit her to rank above Belgium as the premier net importer of wheat in continental Europe. Through December (21 weeks) Broomhall reported shipments of wheat to Italy of 19.0 million bushels as compared with 5.6 million in 1935, and "arrivals" of 9.0 million bushels as against 2 or 3 million in 1935. On the basis of these figures and the relation of net imports to shipments and arrivals in past years, we hazard the guess that Italian net imports in August–December 1936 may have approximated 13 million bushels—perhaps 12 million above last year. Gross imports must have increased even more, for Italy presumably regained some of her lost flour markets after devaluation of the Italian currency in early October and following removal, in several countries, of restrictions on imports from Italy.

Aside from Italy, Belgium and Austria are the only European countries which have surely increased their net imports of wheat this year. Probably Greece has done likewise, but the trade data for that country are as yet available only through September.

In contrast, the British Isles, France, the Netherlands, and Finland appear to have reduced wheat imports this year as compared with 1935–36. In the British Isles and the Netherlands the reduced takings presumably reflect lighter feeding of wheat on account of changed wheat–feed-grain price relationships (p. 240). Finland's lower imports may be explained on the basis of her larger crop. The situation in France, however, is less clear. For that country, standing estimates of crops and carryovers indicate a sharp reduction in the supplies of domestic wheat available for consumption in 1936–37. The small net imports of August–November therefore suggest either (*a*) that domestic wheat stocks must have been at a relatively low level as of December 1—a level that would warrant expectation of heavy imports later in the crop year, or (*b*) that the supplies of French wheat available for 1936–37 are considerably larger than standing estimates indicate. We incline toward the latter view.

The smaller shipments to ex-Europe in August–December 1936 reflected primarily a reduction of Chinese imports. Broomhall reported only 3 million bushels of wheat shipped to China and Japan in the first 21 weeks of the current season, as compared with the moderately low figure of 10 million in the corresponding period last year. Moreover, official Chinese trade data show that China occupied the unusual position of a net exporter of wheat during the first quarter of 1936–37. The takings of other non-European countries or groups of countries, however, differed little from those of last year.[1]

[1] Official monthly trade data are shown for a number of countries in Tables VII and VIII. Broomhall's

The United States, usually a net-exporting country, apparently ranked in August–December as the largest net importer of wheat outside of Europe; indeed, she was outranked only by the United Kingdom and Belgium. Official trade data for the United States, available only through November, show the following distribution of gross imports and exports, from July, in million bushels of wheat:

July–Nov.	Net imports[a]	Imports[b]			Shipments to possessions	Exports	
		Full duty[c]	10 per cent duty[d]	For milling for export		Grain	Flour
1933....	(4.1)[e]	.0	.0	5.0	1.1	.6	7.4
1934....	(2.2)[e]	4.5	1.2	4.8	1.0	2.9	9.1
1935....	15.4	12.2	4.5	4.9	1.0	.1	6.5
1936....	17.8	10.1	3.7	5.7	1.1	1.7	7.5

[a] Figures in this column are for "general trade" (see Table VIII), and are not based upon the import data presented here.
[b] Grain imports only; flour imports are negligible.
[c] Good millable wheat dutiable at 42 cents per bushel.
[d] Wheat "unfit for human consumption."
[e] Net exports.

The striking feature of the wheat trade of this country thus far in 1936–37 has been the heavy importation of hard red spring and durum wheats, reflecting the deficiency of these two types of wheat in an aggregate crop quantitatively about adequate to cover gross domestic consumption. Through November, imports of these wheats over the 42-cent tariff wall totaled about 19 million bushels, or 7 million more than last year. Although imports of feed wheat were somewhat smaller, and exports somewhat larger, this year, the balance in terms of total *net* imports shows an increase of 2.4 million bushels over July–November 1935. This increase probably would not have been recorded had it not been for the maritime strike on the Pacific Coast, which started at midnight October 29 and is not yet settled. During the six or seven weeks prior to the strike, fair shipments of wheat had been made from the Pacific Northwest, principally to Japan; and there is reason to assume that this moderate export business would have continued some weeks longer if the strike had not intervened.

Among other countries that are usually net exporters of wheat, Morocco and probably Tunis also were net importers in August–November 1936. Their net imports, however, were small and, unlike those of the United States, were attributable to serious quantitative deficiencies of the 1936 crops. The three Baltic countries, which in recent years have been classed as small net exporters of wheat, appear not to have had a significant balance of either exports or imports.

Exports.—Net-export data now available for most countries through November (Table VIII) and Broomhall's weekly reports on the sources of world wheat shipments (Chart 4)[1] bring out the principal features of the export movement of wheat during the first five months of 1936–37.

Canada, with exports about four times as large as those of her closest competitor (Australia), contributed approximately half of the world's total shipments of wheat and flour in August–December 1936. Both the amount and percentage of Canadian exports were larger than in several years past. It is almost equally significant that they went less largely than usual to swell bonded stocks of Canadian wheat in the United States; whereas in 1935

shipments to ex-European destinations were as follows, in million bushels:

Aug.-Dec. (21 weeks)	China, Japan	United States	Central America[a]	Brazil	Egypt	North and South Africa	Others[b]
1932.....	25.7	...	14.1	10.7	1.3	.5	1.9
1933.....	13.4	...	14.6	12.2	1.3	.4	2.2
1934[c].....	22.1	...[d]	10.8	12.9	1.0	1.1	1.6
1935.....	10.5	10.1	11.6	13.7	1.4	.6	2.5
1936[c].....	3.4	19.2	12.3	13.1	1.3	1.8	2.0

[a] Includes Venezuela, West Indies, Dutch East Indies, etc.
[b] India, Chile, Peru, Uruguay, Bolivia, Syria, Palestine, New Zealand.
[c] Shipments for 22 weeks minus shipments for the first week.
[d] Probably around 5 million bushels. See footnote c to tabulation on p. 241.
[e] See footnote *d* to tabulation on page 241.

[1] During August–December (21 weeks) Broomhall's recorded shipments were as follows, in million bushels, with comparisons:

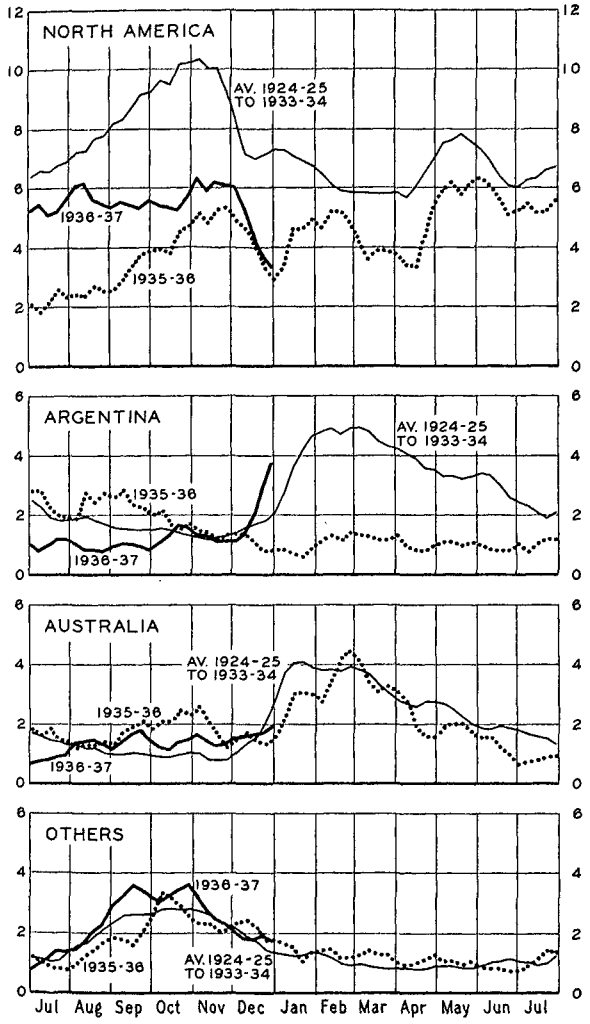
Aug.-Dec. (21 weeks)	Total	North America	Argentina	Australia	Danube	Russia	India	Others
1932.....	236	151	18	35	4	15	0	12
1933.....	210	97	37	32	16	18	0	9
1934[a].....	210	75	70	41	8	2	..[b]	14
1935.....	207	86	39	36	12	24	..[b]	8
1936.....	226	114	26	30	45	0	7	4

[a] Shipments for 22 weeks minus shipments for the first week.
[b] Less than half a million bushels.

these stocks were increased by 24 million bushels during August–December, this year the increase amounted to only 6 million.

CHART 4.—SHIPMENTS BY SOURCES, WEEKLY FROM JULY 1936, WITH COMPARISONS*

(Million bushels; 3-week moving average)



* See Table VI.

Australian and Argentine exports combined were smaller than in any of the three preceding years, and were almost equaled by the exports from the Danube basin. Only in 1931 were Danubian exports larger than this year, and then mainly because of heavier early shipments from Rumania.

Exports from other countries were relatively small, because increased exports from India and Poland were not large enough to offset the reduction in Russian and North African trade. Russia exported (net) just slightly over one million bushels of wheat in August–December, and Algeria probably exported less than six million.

PRICES AND SPREADS

From peaks reached early in August 1936 as the culmination of a steep price advance resting on unfavorable Northern Hemisphere crop developments, futures prices in leading markets receded somewhat (Chart 5, p. 246). The recession (discussed in our last Survey)[1] still appears attributable to a temporary slackening of purchases by importers, based on hopes of establishment of a lower level of prices.

The advance was resumed early in September. It continued, with one significant interruption, until mid-October. Then followed a moderate recession and a period of stability persisting until late November, in which about half of the preceding advance was lost, but not enough to bring prices below the level of early August. Beginning with late November and lasting for about a month, prices rose steeply. This advance much exceeded that of September to mid-October, and was comparable with the midsummer crop-scare rise.

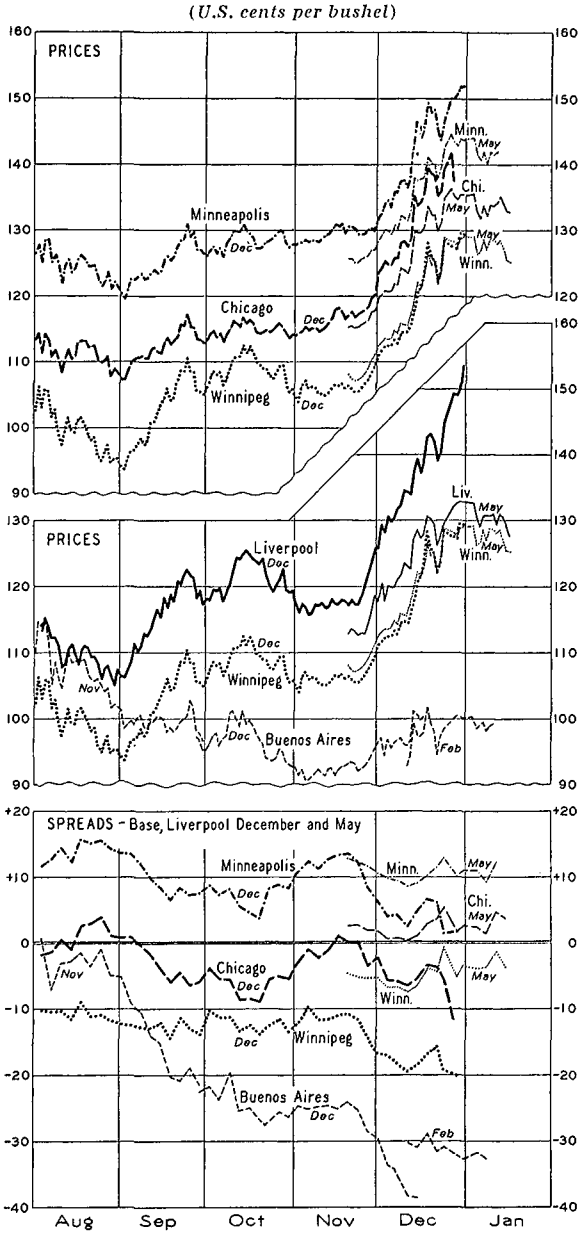
By the end of December and in early January, prices of futures in the leading markets and of representative cash wheats in British markets and in exporting countries had reached levels higher than any since early in 1930. Prices of British import wheat parcels early in January 1937 (in American currency) were nearly three times as high as they were at their postwar low in the winter of 1932–33.

The net advance of prices during September–December was the largest that has occurred in these months in eleven years. It approximated 47 cents at Liverpool and 28–35 cents on North American futures markets (differing according to market and delivery month). The advance was much smaller at Buenos Aires, where prices were in transition from a year of short crop to a year of moderate abundance. In the past fifteen postwar years, a September–December price advance at Liverpool comparable in magnitude with that of

[1] WHEAT STUDIES, September 1936, XIII, 9.

CHART 5.—WHEAT FUTURES PRICES AND SPREADS, FROM AUGUST 1936*

(U.S. cents per bushel)



* Closing prices from *Daily Trade Bulletin*, Chicago; *Grain Trade News*, Winnipeg; *London Grain, Seed and Oil Reporter;* and *Revista Oficial*, Buenos Aires. Conversions at noon cable transfer rates of exchange in New York. Spreads on Tuesdays and Fridays.

1936 can be found only in 1922, 1924, and 1925. All of these years were characterized by a tight international statistical position, broadly similar to that of 1936–37 but different in many details.

September to mid-October.—Price movements during this period were initiated largely at Liverpool during trading sessions; Winnipeg and Chicago tended to follow. Crop developments and marketings appear to have exerted little influence, although market reports referred to dry weather in Australia, wet harvests in northwestern Europe, the first official estimate of the Canadian crop (September 10), and slowing down of Canadian marketings as developments tending to strengthen prices.

The outstanding factor appears to have been fluctuation in the volume of import purchasing on the c.i.f. markets. Up to about September 24, when prices were steadily rising, these markets were active nearly every day. Opinions began to be circulated that European import requirements for the crop year would be larger than had been anticipated; these opinions were based partly upon reports of Italian import purchases.

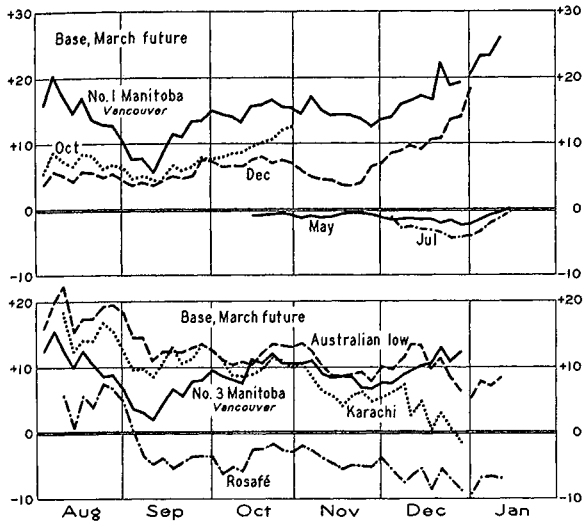
After September 24, there was first a natural pause in the rate of import purchasing, and for some time thereafter a very inactive market caused by currency disturbances attending and following devaluation of the French franc and other national currency units. Prices tended to decline until about October 1, when buyers began to come back into the market, stimulated by some unfavorable news of the Australian crop. On the ensuing rise to the middle of the month, market reports said little about Italian purchases.

During the advances of both September and October, futures prices at Chicago and Minneapolis gained less than prices at Liverpool, especially in early September, and so showed a relative decline (bottom tier, Chart 5). Buenos Aires weakened even more, in adjustment of spreads that would permit free export from a crop which even then gave reasonable promise of a surplus much larger than that of 1935. The necessary adjustment was so large that the general course of futures prices at Buenos Aires was decline rather than advance. Sellers' quotations of Argentine wheat for forward shipment fell about in line with the Liverpool March future early in September (Chart 6). Reduction of the Minneapolis – Winnipeg spread (reflected also in cash wheat prices; Chart 7, p. 249) was insufficient to prevent im-

ports of Canadian wheat into the United States over the tariff wall, though it may have reduced them.

CHART 6.—LIVERPOOL WHEAT PRICE SPREADS, FROM AUGUST 1936*

(U.S. cents per bushel)



* Closing prices of futures and sellers' quotations of parcels, Tuesdays and Fridays, from *London Grain, Seed and Oil Reporter*. Quotations are for prompt shipment except Rosafé, which are for new crop.

After October 1, the October future at Liverpool began to show an increased premium over the December (Chart 6), reflecting a tight cash position there, to which a low level of port stocks bore witness also (Table IV). The October future closed at a premium of 5 to 6 cents over the December, while December stood at a premium over March, and March over May. Similar relationships held at Chicago (Chart 7), where a tight cash position late in September caused that future to close at a widened premium over the December.

Mid-October to late November.—At Liverpool, Winnipeg, and Buenos Aires futures prices declined for a time after mid-October and moved about horizontally during most of November. Favorable crop developments in Argentina, with some pressure to sell for export, apparently offset the confirmation of a rather small crop in Australia and a continuing tendency to raise estimates of import requirements. This was based mainly on evidence of somewhat unexpectedly heavy world wheat shipments and the resumption of Italian import purchases on a fairly substantial scale; also it began to be thought that Germany might later need to import appreciable quantities. British importers, however, were reluctant to buy heavily.

United States markets failed to follow the decline in late October and were firmer than foreign markets in November. Deficiency of moisture for newly sown winter wheat contributed to this development. Minneapolis went to a higher premium over Winnipeg, and Chicago rose to the level of Liverpool. Winnipeg–Liverpool and Buenos Aires–Liverpool spreads remained substantially unchanged.

Late November to December 31.—Crop developments played only a minor part in the steep rise of prices from November 24 to December 31. The Australian second official estimate, issued on November 27, was in accord with expectations. The first official Argentine estimate (250 million bushels), issued December 17, was in the upper range of earlier trade forecasts but attracted little attention; its price effect, if perceptible, was bearish. So also was the official report, issued on December 21, on winter-wheat acreage sown in the United States for the crop of 1937. This report, indicating a new high record of area sown, weakened prices temporarily on the following day. About the only bullish crop news which came to the markets was reports of rainy weather tending to delay harvest in the Southern Hemisphere, and of continuing deficient subsoil moisture in the western wheat belt of the United States and in Canada. On the whole, prices seem to have risen in spite of crop news rather than in response to it.

The influential price factor was active import purchasing within the framework of a recognized tight supply position and a tense European political situation. Specifically, day after day the market reports stressed import purchases of wheat on Italian account. These were widely interpreted as pointing either toward a larger "normal" import requirement for Italy than had generally been assumed or toward a disposition to accumulate "war stocks." Further emphasis upon accumulation of war stocks was afforded by official announcement, on November 28, of the formation in Great Britain of the Food (Defense

Plans) Department; this was accompanied by rumors, without official basis, that the government would accumulate a year's supply of foodstuffs. Diplomatic exchanges between Russia, England, France, Germany, and Italy concerning alleged acts of intervention in the Spanish civil war fostered trade appraisals of the probability that war stocks would be accumulated. Further emphasis upon the tightness of the international supply position was afforded by a news item, appearing December 14, in which Germany was said to need to import a million tons (about 35 million bushels) of wheat. On December 23, Broomhall raised his estimate of world import requirements in 1936–37 from 540 to 568 million bushels. Ocean freight rates rose rather steeply as the price advance progressed, and this may have stimulated import purchases.

Whether for these reasons or merely because their needs became pressing, British buyers entered the market on a large scale. So far as we can judge, transactions on the British c.i.f. markets averaged over twice as large in the five closing weeks of the calendar year as they had in the twelve preceding weeks. Substantial purchases were made for forward shipment, mainly for January–March from the Southern Hemisphere. Some purchases were made for shipment of Canadian wheat after the opening of navigation in the spring and for shipment from India in May–June.

The December price advance was not largely speculative in character. Both at Liverpool and in the United States markets, the volume of trading in wheat futures had frequently been much larger on price advances of somewhat similar magnitude. Trade reports do not indicate widespread public participation. Yet there was a substantial volume of speculative trading in North America in the latter part of December, when Chicago and Winnipeg led the advance. Earlier, Liverpool had led.

On the advance of prices to December 31, the December future at Liverpool rose most, closing (on the 31st) 36 cents higher than it stood on November 24. Corresponding advances in the March and May futures were 22 and 20 cents. The tight cash position apparent in October thus emerged again in December, but was even more marked. Similar but less severe tightness appeared at Chicago (see Chart 7). On the British import market, sellers' quotations of Canadian and Australian wheat rose somewhat more than the Liverpool March future (Chart 6, p. 247), but less than the December. Quotations of Indian and Argentine wheat for forward shipment, however, rose less than the Liverpool March future, as did successive futures at Buenos Aires.

Inter-market spreads behaved erratically, with December futures at Minneapolis, Chicago, and Winnipeg falling to smaller premiums or larger discounts in relation to Liverpool, a reflection of the greater tightness in the Liverpool cash position. For a week in mid-December, however, these futures temporarily reversed their trend, perhaps reflecting a wave of speculative activity in North America. The premium of Minneapolis over Winnipeg declined a little in the course of the advance, in terms of both December and May futures. In the May futures, this spread approximated only 13–15 cents throughout December, in contrast with a spread of around 22 cents between December futures. The smaller spread between May futures may presage cessation of duty-paid imports from Canada into the United States. In January 1936, the spread exceeded 20 cents. Rising ocean freight rates appear to have exerted influence on inter-market spreads most perceptibly upon those between Liverpool and Buenos Aires.

The advance of prices was checked when the wave of heavy import purchases subsided. After about December 20, the volume of purchasing shrank substantially, prices fell for a few days, and subsequent resumption of the upward trend of prices in large part reflected merely the tight immediate cash position in Liverpool and activity there in the December future. May futures at Liverpool, Winnipeg, and Chicago showed net advances of only 2–3 cents between December 18 and the end of the month, whereas the Liverpool December rose 11 cents. The last week of the year, and of the price advance, witnessed inactive or only moderately active c.i.f. markets.

Other prices and spreads.—Certain price de-

velopments appearing in Chart 7 and Table X but not discussed above deserve brief comment.

Cash prices of No. 1 Dark Northern Spring at Minneapolis fell during November and early December (Chart 7) to sizable discounts under the price of No. 2 Manitoba plus the 42-cent duty, but rose to parity again later in December. This temporary discount may have restricted purchases for import, but the facts are not clear especially in the absence of similar behavior of the spreads between futures at Winnipeg and Minneapolis. In any event, these weighted average prices of carlot sales of No. 1 Dark Northern Spring cannot be taken as representing sales of wheat of strictly comparable quality from week to week in a season when reported sales are so few.

The prices of No. 2 Hard Winter at Kansas City have tended gradually to decline throughout the period under review in relation to basic cash wheat at Chicago. This change seems to have represented correction of an unwarranted premium of Kansas City prices over Chicago prices which developed early in the crop year.

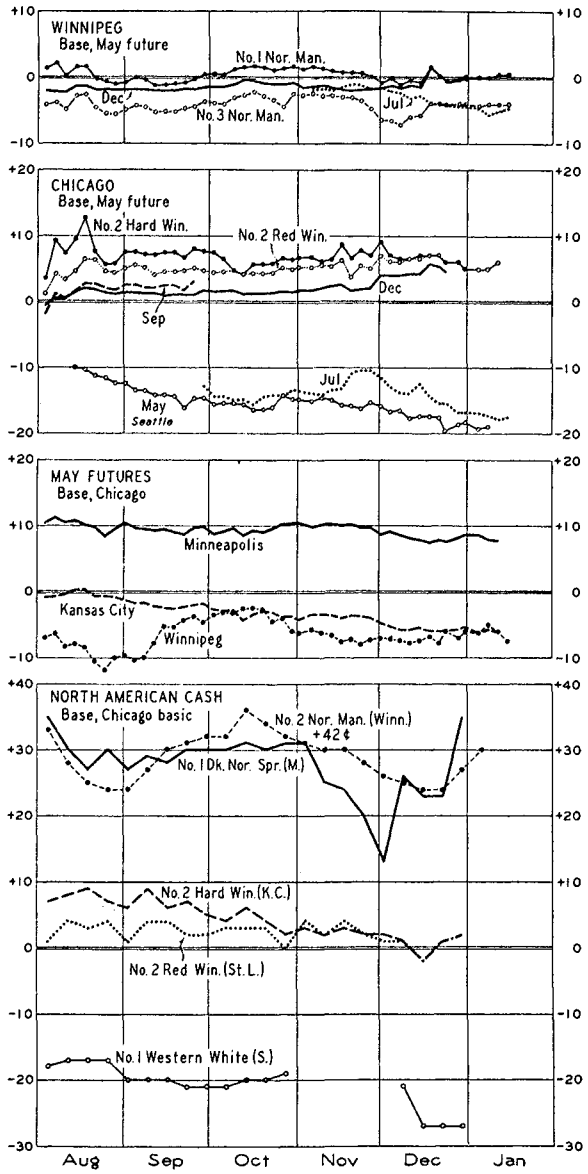
Prices of No. 2 Hard Amber Durum at Minneapolis have fluctuated wildly (Table X), reaching premiums at times even larger than those held by the best grades of hard red spring. These prices also do not pertain to strictly comparable quality of wheat from week to week. Durum wheat supplies are short not only domestically, but in the world at large. French millers have experienced great difficulty in obtaining supplies.

Prices of Western White wheat at Seattle, not quoted for several weeks on account of the dockyard and maritime workers' strike on the Pacific Coast, fell to their largest discount of the year (27 cents under Chicago basic) after quotations were resumed in mid-December. This may presage resumption of exports from the Pacific Northwest. The May future at Seattle has also tended to decline in relation to the Chicago May.

The discount of the July future under the May at Chicago has exceeded 10 cents since the July was first quoted late in September. The spread tended to narrow during most of October and November, but to widen as prices rose in December. The prospects for further

CHART 7.—NORTH AMERICAN WHEAT PRICE SPREADS, FROM AUGUST 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.

change in this spread are discussed below (p. 258). In late December the July future at Chicago ran 13 cents below the Liverpool July—a spread which if maintained and somewhat enlarged would later permit commercial exports of new-crop wheat from the United States. Perhaps in anticipation of such a development, the July future at Winnipeg moved during December from a position of approxi-

mate parity with the May to a position 4 cents under. This change of position, however, must reflect also a market opinion that Canadian supplies will be reduced to a very low level by the end of May.

On European markets, fixed prices have prevailed in France, Germany, and Italy, while British domestic wheats have followed the international price movements (Table X). Devaluation of currencies in France and Italy, unaccompanied by corresponding alteration of fixed prices of wheat, has disturbed price relationships between wheat and other farm products and farm expenses, and has given rise to agitation for elevation of the wheat price. In order to induce farmers not to feed wheat to animals and to market more freely, the German authorities altered the fixed-price schedule (from early December) so as to permit producers to obtain at once the prices formerly scheduled for later in the crop year.

Recent price developments require little comment. Up to January 19, futures prices in all markets tended to recede somewhat from the peaks of late December, but the recession has been small. In Liverpool, March wheat has fallen to a substantial discount.

Trade Outlook

In September we forecast world net exports of wheat and flour in 1936–37 at 520 million bushels. We now put our forecast at 560 million, largely because the crops of European importing countries turned out somewhat less favorably than we anticipated and because the Italian government now appears to be able and willing to finance larger imports of wheat than we previously expected. Our present forecast, like the earlier one, makes no allowance for the building up of war stocks in Europe during 1936–37. Thus far, there has appeared no important evidence to suggest that any substantial quantity of the wheat already purchased is destined for this purpose; nor do recent political and financial developments in Europe lead us to regard war as more imminent than several months ago.

European imports.—The outlook for total net exports, which we consider the most satisfactory basic measure of the volume of world trade in wheat, rests heavily upon the prospective import demand of European countries. Our September forecast of 390 million bushels for the net imports of European net-importing countries in 1936–37 was based on the assumption that the crop estimate then standing for Europe ex-Danube would, as in most other recent years, be revised upward appreciably. This assumption now appears untenable. Since September the crop estimate for Europe ex-Danube has not only failed to be revised upward, but has actually been lowered by 13 million bushels. In September we suggested that "on the basis of *standing* crop estimates for 1936 . . . . we should place European import requirements . . . . perhaps at 405 million bushels."[1] Now that the total of estimates standing in September has been lowered rather than raised, and since the Italian government has recently purchased wheat more actively than had been anticipated, we raise the forecast of European net-import requirements to 425 million bushels.[2] The net imports may be expected to be distributed about as follows, in million bushels, with comparisons:

Country	Total		Aug.–Nov.	
	1936–37 forecast	1935–36 reported	1936–37 reported[a]	1935–36 reported
British Isles	220	220	71	73
France	17	8	2	6
Italy	50	6[b]	9[b]	1[b]
Germany	10	Exp.	..[c]	..[c]
Netherlands, Belgium, Switzerland	79	78	28	29
Austria, Czechoslovakia	10[d]	9	4[d]	4
Denmark, Norway, Finland	21	21	6	6
Greece	17	15	6	6
Spain, Portugal	1	Exp.	..[c]	..[c]
Total	425	357	126	125

[a] Partly estimated; see Table VII.
[b] Our "guestimate"; no official data available.
[c] Less than half a million bushels.
[d] Not deducting net exports from Czechoslovakia in 1936–37.

[1] "World Wheat Survey and Outlook, September 1936," Wheat Studies, XIII, 18.

[2] In this forecast we have not made any special allowance for large quantities of "unmillable wheat" alleged to be in western European crops this year. It is possible that such quantities of very low quality wheat exist and have been included in the official crop estimates; but past experience makes us wary of putting much faith in startling rumors pertaining to "unmillable wheat."

In the foregoing forecast for 1936–37, the figures open to the greatest question are those for France, Germany, and Italy. On a purely statistical basis—crop plus estimated carryover—the domestic wheat supplies of France appear so short this year as to warrant an import forecast of at least 50 million bushels. However, France imported net only about 2 million bushels in the first third of the crop year, and observers within the country report no evidence of wheat scarcity, except as regards durum. We therefore infer that official statistics considerably understate the available supplies of wheat. The magnitude of the understatement is as yet not clear, but at present we incline to the view that French net imports in 1936–37 will fall within the range of 10–25 million bushels.

German supply statistics, on the other hand, suggest little need of import wheat—at least as compared with estimated consumption in the five years prior to 1935–36. But measures recently taken by the German government to hasten wheat marketings and to contract the use of wheat for both food and feed (p. 239) suggest a greater shortage of domestic supplies than is indicated by the official figures. Nevertheless, we regard it as unlikely that German net imports of wheat will exceed 5–15 million bushels this year, unless the government succeeds in establishing larger foreign credits than appear to have been available to it in recent months. Germany's barter trade agreements with several wheat-exporting countries (notably Canada, Yugoslavia, and Czechoslovakia) do not seem to promise large wheat imports in 1936–37; and the recent drastic reduction of German tariff duties on wheat are of slight significance in view of the governmental monopoly of trade in that country.

If the standing Italian crop estimate (based on a statement by Mussolini) is reasonably accurate, and if a small reduction is made in the domestic wheat carryover, wheat consumption in Italy in 1936–37 can apparently be maintained at about the level of last year (higher than in 1934–35) by net imports of around 50 million bushels. Had Italy not been able to obtain larger foreign credits this year, and also to negotiate important trade agreements with several wheat-exporting countries, we should not feel warranted in forecasting her net imports at so high a figure. But in view of the existing circumstances, and since Italy is estimated by trade sources to have made contracts up to early January for the purchase of 30–35 million bushels of foreign wheat, it seems reasonable to expect her net imports for the year to reach 50 million bushels.

A forecast notably larger than this would appear excessive in view of (*a*) Italy's fundamentally unsolved foreign exchange problems and (*b*) her apparently moderate imports of wheat during the first five months of the current crop year. Since Italian peasants are rumored to have marketed their wheat more slowly than usual, and since the Italian government is known to have made trade agreements involving fairly large wheat imports from Hungary and Yugoslavia — countries which normally export the bulk of their wheat early in the season— it might seem reasonable to assume that Italian imports would this year be proportionally heavier than usual in the early months. Reports of the low quality of the Italian crop of 1936 likewise support this view. Yet we interpret the available data (admittedly inadequate) to indicate that Italy's net wheat imports through December amounted to only about 13 million bushels—a figure which would represent about the average seasonal distribution of net imports of 50 million bushels in the crop year.

In view of these considerations, it appears unreasonable for traders to talk (as some have) of Italian net imports of 80 million bushels in 1936–37; and even estimates of 60–70 million seem likely to prove too high. Although Broomhall has recently forecast "Italian imports" at 64 million bushels, his forecast apparently does not apply to *net* imports and consequently is not directly comparable with ours. The "reported trade" figure he presents for Italy for 1934–35 (the last year for which official data are available) is 16 million bushels, a third higher than reported *net* imports.

Total net exports.—To complete a calculation of the probable volume of net exports based on an appraisal of import requirements, two further steps are necessary: (1) ex-European imports must be added to European im-

ports; and (2) allowance must be made for changes in stocks afloat and in comparable positions (Canadian wheat in the United States and United States wheat in Canada).

In September we forecast United States net imports of wheat in July–June at 25 million bushels, and commented that this probably implied August–July net imports of around 22 million. This estimate and our September forecast of a reduction of about 8 million bushels from 1935–36 in the calculable net imports of other ex-European countries still appear appropriate.

We summarize below our calculation of net exports on this basis, in million bushels:

Aug.–July	Net imports			Change in stocks[b]	Calculable demand[c]	Total net exports	Difference
	Europe	U.S.	Other[a] ex-Europe				
1932–33.....	442	..	121	— 9	554	630	76
1933–34.....	395	..	111	+ 2	508	557	49
1934–35.....	375	4	116	—17	478	538	60
1935–36.....	357	31	88[d]	+12	488	524	36
Forecast 1936–37...	425	22	80	—12	515	555–565	40–50

[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 U.S. 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.

This detailed calculation, indicating probable net exports for 1936–37 at about 555–565 million bushels, may be supplemented by simpler computations based on the assumption that exports and shipments during the first four or five months of the season throw light upon the level of exports and of shipments, respectively, to be expected for the season as a whole.

For exports, one may take the sum of reported (partly estimated) net exports in August–November and on the basis of the seasonal movement of trade in past years (with due consideration of changes in stocks afloat and in comparable positions)[1] hazard a guess as to the season's total in 1936–37. This method suggests a probable range for total net exports this year of 535–590 million bushels, with a figure somewhere near the middle of the range appearing the most reasonable.

Second, instead of using August–November net-export data as the basis of forecast, one may take Broomhall's reported shipments through December. Shipments to Europe in August–December, adjusted for change in stocks afloat and in ports of the United Kingdom, totaled 160 million bushels. We assume that this year European importing countries filled a smaller proportion of their import requirements than usual in the first five months of the season. During the past fifteen years, the lowest percentage recorded for these months was 35.7 in 1926–27 when, following the British coal strike, there were abnormal disturbances in the freight market. For other, more normal, postwar years the lowest percentage of adjusted shipments to Europe in August–December was 38.0 in 1923–24. This figure we regard as a more reasonable basis of forecast for 1936–37. We interpret it to imply reported shipments to Europe this year of around 420 million bushels.

Shipments to ex-European countries other than the United States amounted to 34 million bushels in August–December. Since there appears to be no reason to assume that the movement of wheat to these countries in 1936–37 will depart appreciably from the average seasonal course, we forecast the crop-year total at 90–95 million bushels. With the addition of about 30 million, which may be reported as shipped to the United States, the total to all ex-European countries may be 120–125 million bushels. This figure, added to our forecast of 420 million bushels to be shipped to Europe, would bring world total shipments to 540–545 million. With the excess of net exports over shipments in 1936–37 now indicated (on the basis of August–November data) to be in the neighborhood of 15–20 million bushels, we should be inclined on this basis of estimation to forecast total net exports at 555–565 million bushels.

The three different methods of forecast outlined above suggest a probable range for total net exports in 1936–37 of 555–565 mil-

[1] Canadian wheat in the United States, United States wheat in Canada, and stocks in ports of the United Kingdom.

lion bushels, and it seems reasonable to select 560 million as the most likely figure. This figure and the indicated range of 555–565 million bushels rest heavily upon the assumption that exports of wheat to Europe were this year proportionally lighter than usual in August–December. If this assumption is not valid, total net exports will be smaller than we have suggested. On the other hand, we may not have allowed for as much deviation of exports from their average seasonal movement as may later prove to have been warranted; if so, reported net exports will be larger than our present forecast.

In the following tabulation our forecasts of various measures of international trade for 1936–37 are summarized, with comparisons, in million bushels:

August–July	Net exports	Shipments			European net imports[a]
		Total	To Europe	To ex-Europe	
1932–33	630	615	449	166	442
1933–34	557	524	402	122	395
1934–35	538	516	373	144	375
1935–36	524	494	358	136	357
1936–37 forecasts					
F.R.I.,[b] Jan.	560	540	420	120	425
Broomhall, Dec.	...	568	448	120	...
I.I.A.,[c] Oct.	533[d]	...	...	...	425

[a] Net imports of net-importing countries, without deduction of the net exports of any country. The forecast of the I.I.A. has been adjusted to this basis.

[b] Food Research Institute.

[c] International Institute of Agriculture.

[d] Derived from the International Institute's forecast of world requirements at 545 million bushels. We judge that about 12 million bushels of the requirements may be obtained by reduction of stocks of Canadian wheat in the United States and of stocks afloat. If so, the volume of net exports implied is 533 million bushels.

Broomhall's recently revised forecast of trade in 1936–37 is over 25 million bushels higher than our present forecast, with the difference lying wholly in the estimated trade of European countries, primarily of Italy, but also of the British Isles and several smaller importing countries. The forecast of the International Institute of Agriculture, on the other hand, differs from ours mainly in the distribution of European net imports and in the allowance of a smaller difference this year between European net imports and total net exports.

Sources of exports.—If net exports of wheat and flour total 560 million bushels in 1936–37, they may be distributed about as follows, in million bushels:

Country	1936–37 forecast	1935–36 reported	1934–35 reported
Canada	200	254	165
Australia	90	103	109
Argentina	145	70	182
Lower Danube	85	24	22
French N. Africa	9	19	26
USSR	1	29	2
Others	30	25	32
Total	560	524	538

We count on the two Southern Hemisphere countries shipping out the bulk of their exportable supplies during January–July, thus increasing their aggregate net exports in 1936–37 by about 65 million bushels as compared with 1935–36. For the Danube countries, our forecast implies net exports of record postwar size, but allows also for expansion of wheat consumption and, except in Hungary, some building up of domestic stocks. In French North Africa, on the other hand, native wheat supplies are so short this year as to suggest the smallest net exports since 1927–28; and of the three countries concerned, only Algeria definitely promises to be a net exporter. Among "other" exporting countries, India and Poland will probably be the two largest shippers of wheat in 1936–37, with Czechoslovakia and the Near Eastern countries contributing smaller quantities. Last year Sweden, Latvia, Lithuania, and Portugal all exported significant quantities of wheat; but this year none of these countries (except perhaps Sweden) appears likely to rank as a net wheat exporter.

With Russia practically out of the international wheat market this year, and with exports from all other countries now forecast at 360 million bushels, Canada will presumably be called upon for net exports of around 200 million. This implies reduction of the Canadian carryover to a point corresponding to the moderate average level of years prior to 1928.

Prospective Carryover

At the end of the crop year 1936–37, world wheat stocks now seem likely to total only about 520 million bushels, or 200 million less

than at the beginning of the year. So low a level has not been witnessed since 1924–25; and in fifteen postwar years only the estimated stocks as of about August 1, 1923 and 1925, are comparably low. The year 1936–37 thus brings to an end (at least temporarily) the period of burdensome world wheat surplus which has continued since the late 'twenties. At 520 million bushels, total year-end stocks in 1937 would amount to less than half of the peak carryover of 1934, and would be around 80 million bushels below the average carryover for the five years 1923–27.

The distribution of prospective year-end stocks, as well as the total, is important for appraisal of probable future price developments. We therefore present below a detailed forecast of year-end stocks as of about August 1, 1937, with significant comparisons, in million bushels:

Position	Estimates					Forecast
	1923–27	1923	1925	1926	1936	1937
United States[a]	117	132	108	100	137	115
U.S. in Canada[a]	1	1	3	1	0	0
Canada	38	32	27	36	110	35
Canadian in U.S.	3	1	3	4	19	5
Australia	31	33	28	24	42	30
Argentina	65	64	58	67	60	65
Total	255	263	227	232	308	250
Lower Danube[b]	37	36	20	40	25	35
French N. Africa[c]	13	4	11	18	12	4
India	46	36	51	49	29	29
Total	96	76	82	107	66	68
Europe ex-Danube	192	154	170	211	246	160
Japan and Egypt	13	11	8	16	10	9
Afloat to Europe	40	39	33	39	21	23
Afloat to ex-Europe	7	8	6	7	11	10
Total	252	212	217	273	288	202
Grand total	603	551	526	612	722	520

[a] As of July 1.
[b] Hungary, Yugoslavia, Rumania, Bulgaria.
[c] Morocco, Algeria, Tunis.

The estimates of disposition which underlie our forecasts of stocks in the United States and in the three chief exporting countries are shown in Table IX. In all of these countries, we count on stocks in 1937 being close to the 1923–27 average level. Domestic consumption of wheat in Argentina and Australia will probably be a trifle higher in 1936–37 than in 1935–36, reflecting a slight increase in the use of wheat for food and seed. In the United States, increase in the amount of wheat used for these purposes will presumably be a little larger (around 8 million bushels for seed alone); and the amount of wheat fed will probably not be significantly reduced in spite of the better quality of the North American wheat crop of 1936 and the higher average level of wheat prices this year. Only for Canada do our figures imply some reduction in domestic utilization of wheat in 1936–37, based primarily on the higher quality of the Canadian crop.

Appraisal of prospective wheat supplies and utilization in the various countries of Europe suggests that wheat carryovers in 1937 will be at low levels in practically all countries except Czechoslovakia, Yugoslavia, and Rumania. As observed before (p. 250), our forecasts of trade do not make allowance for possible building up of "security stocks" in European countries during 1936–37. Such a development (not yet clearly in prospect) would necessitate increase in our forecasts of total net exports, European net imports, and year-end stocks in Europe ex-Danube, and reduction of estimated stocks in Canada and perhaps the Danube basin.

Although our forecasts of total stocks as of August 1, 1937, might be interpreted to imply a current international supply position at least as tight as in 1924–25 and considerably tighter than in 1925–26, close study of the indicated distribution of stocks in these years throws doubt upon the validity of such a conclusion.

It has long been recognized that stocks in various locations have various degrees of significance for the international wheat position. Of those covered by our estimates, the stocks in India are unquestionably of least importance. India's annual contributions of wheat to world markets seem to be determined much less by the magnitude of domestic supplies than by the general level of wheat prices and the relationship of wheat prices to prices of native grains. To get a better picture of the relative tightness of the world wheat situation in 1922–23, 1924–25, 1925–26, and 1936–37, it seems reasonable to deduct from the estimated total stocks our allowances for stocks in India.

The result is presented below in million bushels:

	1923	1925	1926	1937
Stocks ex-India	515	475	563	491

These figures, and other considerations bearing on the distribution of stocks in the years indicated, suggest that the current wheat supply position is perhaps about as tight as on the average in 1924–25 and 1925–26. Various factors obscure the comparison of 1936–37 with 1922–23: perhaps in these two years wheat supplies were about equally adequate, or perhaps in one year they were more adequate than in the other—but only by a small margin.

Outlook for Prices

Dominant in the wheat price outlook as of mid-January are uncertainties regarding present supplies and requirements, and the wide range of possible price reactions to unpredictable developments affecting new-crop prospects. Within the range of possibilities, those that would make for prices of May futures in all principal markets higher in April or May than in mid-January appear rather more probable than those that would make for lower prices.[1] Among the markets, Winnipeg stands in the most favorable position for a price advance and Chicago perhaps in the least favorable position, unless threatened severe damage to winter wheat should materialize.

This present view of the price outlook is necessarily subject to revision in coming weeks and months as progressive developments remove current uncertainties and require altered judgments of probabilities for the future. Subsequent paragraphs serve to indicate the grounds for this present view of the outlook; but they are intended more particularly to provide a broad basis for continuing interpretation of developments and for necessary reappraisals of the outlook.

Appraisal of wheat price prospects during January–May turns chiefly on the answers to three questions: (1) Does the supply position as we now interpret it, in connection with related circumstances, indicate likelihood of any marked price change? (2) What changes in apparent tightness of the international position appear among the possibilities? (3) What effects may be produced by developing prospects for the wheat crops of 1937? It is convenient to discuss these questions in reverse order.

Possible crop developments.—The possibilities for price movements in consequence of changing prospects for the new crop include at their extremes either drastic price decline or strong advance. Prices are in a position to be strongly influenced by crop developments; and the North American crop stands in a precarious position, from which either great improvement or extreme deterioration is possible. The poor condition of fall-sown wheat in the United States and the scarcity of soil moisture over most of the spring-wheat territory of North America now appear to be largely offset by the presence of an acreage sown to winter wheat in the United States 15 per cent in excess of the large area sown for the 1936 crop and by the prospect of a considerable increase (weather permitting) in plantings of spring wheat, both in the United States and in Canada. Weather during the next few months may result either in near certainty of another short wheat crop in North America, or in promise of a harvest of record size.

Important price influences from developing prospects for the North American wheat crop are likely to be delayed until April or May. They may then dominate the price situation. They will affect prices of cash wheat and of old-crop futures about as much as they affect prices of new-crop futures. The direction of their influence, however, is not now predictable. For convenience in discussion in subsequent paragraphs of the probable influences from other factors, we assume (what is actually very unlikely) that the net effect of changing new-crop prospects will be nil.

Uncertainties in the supply position.—Possible changes in appraisal of the tightness of the old-crop supply position will affect chiefly the prices of cash wheat and of old-crop futures, including July wheat at Liverpool and

[1] This is written on January 19, with latest prices of the May futures recorded, roundly, as: Liverpool, $1.26; Winnipeg, $1.23; and Chicago, $1.31.

Winnipeg. At Chicago, July wheat is dominantly a new-crop future, but tends to be more affected than the September by changes in apparent tightness in the supply position in a year of shortage, such as the present one.

The actual supply position will be gradually clarified during January–June. Current uncertainties mainly concern prospective European imports—chiefly as regards France, Italy, and Germany—and the balance between imports and exports of the United States. Our calculations, as reflected in the estimates of prospective imports and exports and of prospective carryovers about August 1 reflect, among other things, the judgment that French domestic supplies are not nearly as short as indicated by current official statistics; that Italian and German net imports will approximate 50 and 10 million bushels, respectively, during August–July; and that United States net imports during December–July will total only 7 million bushels. While we regard these estimates as soundly based on the best current information, it is to be emphasized that the possibilities of error in the estimates are considerable, and chiefly in one direction: the net imports of none of these countries can fall very much under the figures we suggest, and French net imports, at least, might exceed our estimates substantially. Moreover, we count upon a very low level of stocks in importing countries, whereas a higher level is possible.

In September we expressed the view that in the situation then prevailing bearish developments would have only small price effects, while bullish developments might raise prices greatly. At the much higher prices current in mid-January, the possibilities of price decline more nearly equal the possibilities of price advance induced by equal but opposite changes in the appearance of the supply position. There is again, however, greater likelihood of important price advances from such changes than of important price declines during January–May, chiefly because significant tightening in the apparent supply position is somewhat more likely than significant easing during January–May. The "surprises" that would affect the markets seem to be still on the side of emergence or renewal of import demand. Possibilities in this respect after May permit no significant comment.

Present indications.—The foregoing discussion of price movements to be anticipated from possible changes in new-crop prospects or from changes in the apparent tightness of the old-crop supply situation is pertinent chiefly as a basis for appraising the significance of new developments as they arise. It affords a basis for present judgments only in suggesting that the price outlook is highly uncertain — developments which cannot be foreseen holding possibilities of large price changes in either direction—but that developments which would cause price advance are somewhat the more likely. Indications of more immediate use for current judgments must be found, if at all, in an appraisal of current prices in the light of the supply position as it now appears.

Supposing the international supply position for 1936–37 to be correctly reflected in the estimates of prospective trade and of August 1 carryovers given in previous sections, we judge international prices as of mid-January to rest on a firm basis. 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.

The supply position for 1936–37 now appears definitely to be about as tight as were the positions in 1924–25 and 1925–26. After the March reaction from the extreme reached in January and February, the price of the Liverpool May future in the spring of 1925 ranged mostly between $1.65 and $1.75 per bushel. In the spring of 1926, the corresponding range was $1.55–$1.70. The general level of wholesale prices is now about 85 per cent of that in 1925 and 1926, and one may calculate roughly that prices of $1.30–$1.50 should be regarded as equivalent to the stated price ranges in those earlier years.

A further factor that probably requires consideration, however, is the prevalent view respecting prices to be expected following harvest of the new crop in the Northern Hem-

isphere. Such expectations influence disposition toward reduction of year-end stocks to the very low levels required to permit normal consumption when supplies are short. Allowing for such differences between the present situation and those in the spring of 1925 and of 1926, and for uncertainties in the comparability of the data, this comparison suggests prices of the Liverpool May future in the range $1.20–1.45 during January–May 1937. A corresponding implied range for the Chicago May future, in view of the shortage of domestic supplies, would be $1.25–1.45. These calculations, it should be repeated, assume that no important developments arise calling for change in our calculation of supplies and requirements for 1936–37 or for reappraisal of crop prospects for 1937–38.

Another suggestive appraisal of the price outlook may be made in terms of patterns of price movement observed previously under more or less similar circumstances. Last September we emphasized this similarity between the situation for 1936–37 and that of 1897–98, and partly on the ground of this comparison hazarded the view that, "assuming no new developments of importance, the Liverpool December future appears unlikely to advance materially above $1.16 during September – November."[1] The subsequent course of prices, interpreted in connection with the actual new developments, appears consistent with this view. The sharp price advance of last December, however, renders comparison with 1897–98 of little further use. Comparisons with price movements in 1924–25 and 1925–26 now naturally suggest themselves. It remains pertinent, nevertheless, to note that in the autumn of 1936–37, as in 1897–98, the market was slow to react fully to a sharply altered supply situation; and that this basic conservatism doubtless restrained the price advance in December 1936. Other evidence that price advances thus far have been moderate in view of the tight international supply situation will be noted below.

On the ground of timing of the winter price advance, comparison of price movements in 1936–37 with those of 1924–25 appears the most logical. Such a comparison seems inappropriate in view of notable differences between the forces behind the price advances in the two instances. In 1924–25 the price advance of December–January was led by North American markets[2] and rested chiefly on a great speculative wave of bullish enthusiasm in the futures markets, from which a severe reaction was reasonably to have been expected. In the recent price advances from the end of last November, however, the Liverpool market led during much of the movement, and such advances as were initiated in North American markets were freely followed by Liverpool. In these respects the recent movement is more clearly comparable with the price advance of 1925–26, which occurred chiefly during November.

Even the situation in the winter of 1925–26 does not present a close parallel with that of 1936–37 as regards price behavior. In the recent advance the Liverpool March future rose only about 20 cents, whereas in the corresponding advance in 1925–26 it rose about 40 cents. Culmination of the 1925–26 advance was followed by wide and erratic fluctuations suggestive of an unstable foundation for the rise, whereas the price dip last December following the main price advance was moderate, and prices have now been fairly well maintained in all markets for a month since the initial peak was reached. On grounds of general tendencies in wheat price behavior, it appears unreasonable to expect the recent price advance to be followed in the next month or two by a price decline even remotely resembling that of March 1925, or by a decline comparable in relative magnitude with that of January–February 1926.

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. With European import requirements for the near future now apparently well taken care of by the early rush of Argentine shipments, however, Liverpool prices may continue weak until late February or

[1] WHEAT STUDIES, September 1936, XIII, 23.

[2] See Robert D. Calkins and Holbrook Working, "Price Leadership and Interaction among Major Wheat Futures Markets," WHEAT STUDIES, November 1933, X, 46–49.

March. General tendencies in wheat price behavior give little ground for expecting price recovery in March or April except in the presence of indicated damage to the winter-wheat crop in the United States (a very reasonable possibility in the light of present crop conditions, yet not to be predicted with any assurance). But if we are correct in the view that recent price advances have conservatively reflected the tightness of the international supply position, 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.[1]

Price spreads. — The outlook for price spreads between old-crop and new-crop futures in Liverpool and in North American markets is this year intimately associated with the general wheat price outlook. Price responses to new-crop developments will be similarly reflected in all futures, but price movements associated with changing appraisal of the current supply position will affect chiefly the old-crop futures. In Liverpool even the July option is a "Southern Hemisphere old-crop" future. Our present appraisal of the international supply position suggests that after trading starts in the October future (perhaps in February) it may be quoted some 10 cents under the Liverpool July. If this view is correct, the difference between Winnipeg July and October may widen considerably from the spread of about 10 cents that has recently prevailed.

In Chicago the spread between May and July wheat depends in large degree on appraisals of the domestic supply position, which now appears tighter than it did in September, when we anticipated that during October–November the July future might be quoted at only 5–10 cents under the May. Under ordinary conditions our present forecast of wheat carryover in the United States on July 1, at about 115 million bushels, would suggest a May–July spread during the next two months of 10–20 cents (a range reflecting in part the uncertainty of estimates of carryovers). The present combination of both international and domestic shortage of supplies 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.[2]

When Chicago July wheat has been at a large discount under the May, September has commonly ruled at about half as great a discount under July wheat through April, except when there has been threat of a "squeeze" in the May future, or in both the May and the July. The July–September spread may this year be generally narrower than suggested by this observation, however, since an important factor tending toward a wide spread between the May and July futures—the tendency for Chicago May wheat to stay near a level permitting Canadian importation — does not strongly affect the July–September spread. The outlook for carryover is such as to suggest that the latter spread may narrow to 2 or 3 cents or less by late June.[3]

Inter-market spreads of chief interest are those involving the May futures. Canadian wheat, representing only a small fraction of importers' supplies during January–July, may go to increased premiums over other wheats in import markets, permitting an advance of the Winnipeg May future relative to Liverpool. Such a change has occurred in many past years. Minneapolis May wheat stands currently in an equivocal position relative to Winnipeg—too low to permit long

[1] A discussion of seasonal tendencies in the price of the Chicago May future, with charts especially arranged for convenient study of seasonal tendencies, will be found in Holbrook Working, "Price Relations between May and New-Crop Wheat Futures at Chicago since 1885," WHEAT STUDIES, February 1934, X, 213–18. For a chart and discussion of seasonal tendencies in the July future, see "Price Relations between July and September Wheat Futures at Chicago since 1885," WHEAT STUDIES, March 1933, IX, 219–21.

Charts providing a convenient continuous record of prices of cash wheat and all the principal futures, weekly, will be found in "Prices of Cash Wheat and Futures at Chicago since 1883," WHEAT STUDIES, November 1934, XI. These are especially useful for comparison of price movements in other years in which the situations were more or less similar to the present one.

[2] See Holbrook Working, "Price Relations between May and New-Crop Wheat Futures at Chicago since 1885," WHEAT STUDIES, February 1934, X, 209–13.

[3] *Ibid.*, Chart 2, p. 190.

continuance of imports from Canada, yet higher than might be expected if importations are to be definitely discontinued.[1] This reflects an uncertainty in the market which may shortly be resolved, with a consequent shift in this price spread. 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, since cessation of importations would strengthen the position of hard spring wheats relative to hard winters. Settlement of the strike which has tied up Pacific Coast shipping may weaken prices of soft wheat in the East and tend also toward a decline in the Chicago May future relative to other markets, including Kansas City, while strengthening prices of soft wheat on the Pacific Coast.

Combination of the anticipated relations between Chicago and Minneapolis, Minneapolis and Winnipeg, and Winnipeg and Liverpool leaves indeterminate the outlook for relations between Chicago and Liverpool May wheat. These prospects are better judged on the basis of relations between the July futures. 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.

[1] If continued importation on a large scale were clearly in prospect through May, this spread would be about 27 cents instead of 15 cents, as it has been recently.

This survey was written by Helen C. Farnsworth, M. K. Bennett, and Holbrook Working with the advice of Joseph S. Davis. 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	3,813	3,270	543	552	745	1,742	367	1,375	70	353	351	1,019
1934.....	3,341	3,490	3,045	445	526	650	1,546	249	1,297	97	352	319	1,117
1935.....	3,391	*3,554*	*3,184*	*370*	626	566	1,575	302	1,273	70	363	*352*	1,133
1936[f].....	*3,297*	.....	.....	...	630	*598*	*1,487*	371	*1,116*	52	352	...	.....
1936[g].....	*3,309*	*3,457*	*2,994*	*463*	626	614	*1,485*	382	*1,103*	49	352	*331*	.....

* 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 Sept. 15, 1936.

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

TABLE II.—WHEAT PRODUCTION IN PRINCIPAL 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	281.9	142.6	141.0	15.1	34.2	....	84.2	73.1	96.4	47.9	20.0	33.5	16.5
1936[a]..	519.1	111.1	233.0	*150.0*	*215.0*	....	....	....	88.1	105.7	121.3	55.8	15.5	28.5	7.7
1936[b]..	519.0	107.4	229.2	134.2	249.9	....	....	....	86.7	107.4	128.7	59.3	13.2	27.8	7.7

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	283.9	171.5	62.1	15.5	5.99	15.8	16.7	14.7	1.87	23.6	158.0	22.1
1936[a]..	*56.8*	*9.50*	*240.0*	*238.8*	176.7	54.0	*14.7*	4.70	*16.7*	16.0	*12.9*	*2.30*	22.7	121.5	8.4
1936[b]..	*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

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	92.3	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	99.6	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	*25.4*	43.2	48.7	9.7	36.9	10.7	20.2	8.86
1936[a]..	*77.2*	*8.8*	3.05	2.31	4.69	23.7	80.3	*23.1*	45.4	46.2	*9.0*	30.0	13.0	*12.0*	....
1936[b]..	78.3	7.5	5.25	2.40	5.44	23.7	80.3	*23.1*	45.7	45.2	*9.0*	32.4	13.0	15.8	....

* 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 Sept. 15, 1936.

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

[c] Including Luxemburg.

[d] Syria, Lebanon, Palestine, Cyprus.

TABLE III.—WHEAT RECEIPTS IN NORTH AMERICA, MONTHLY, JULY–DECEMBER 1931–36*

(Million bushels)

Year	United States (13 primary markets)							Canada (country elevators and platform loadings)						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	July-Dec.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Aug.-Dec.
1931.....	104.0	61.5	38.9	32.7	26.4	13.8	277.3	5.4	11.9	47.4	76.3	41.7	18.8	196.1
1932.....	41.0	40.7	38.4	27.2	17.6	13.9	178.8	3.2	17.6	120.5	81.0	38.1	18.5	275.7
1933.....	37.2	26.7	22.6	17.6	11.6	11.2	126.9	10.5	25.6	55.6	46.4	23.0	10.3	160.9
1934.....	49.7	23.0	19.1	12.9	9.2	7.8	121.7	10.9	30.8	55.6	50.8	23.6	12.5	173.3
1935.....	28.9	48.2	42.3	27.9	14.5	9.9	171.7	12.6	13.3	73.2	60.0	21.0	14.2	181.7
1936.....	84.2	29.5	10.6	15.2	10.7	10.4	160.6	4.0	40.8	57.7	22.6	9.0	8.0	138.1

* United States data unofficial, compiled from *Survey of Current Business;* Canadian data computed from official figures given in *Canadian Grain Statistics.* U.S. data for 1931 and 1932 are for 14 markets, including Toledo.

TABLE IV.—WHEAT VISIBLE SUPPLIES, SEPTEMBER–JANUARY 1936–37, WITH COMPARISONS*

(Million bushels)

Date	Total	United States grain		Canadian grain		Total North America	Afloat to Europe	U.K. ports	Total U.K. and afloat	Australia	Argentina
		United States	Canada	Canada	United States						
Aug. 1, 1932.....	385.5	175.9	15.4	116.8	4.7	312.8	31.4	9.1	40.5	26.0	6.2
1933.....	423.2	135.0	3.7	190.4	6.7	335.8	31.6	11.4	43.0	31.5	12.9
1934.....	423.2	115.9	.0	177.6	9.8	303.3	34.8	13.6	48.4	52.0	19.5
1935.....	302.2	34.7	.0	186.8	10.5	232.0	16.9	8.8	25.7	32.0	12.5
1936.....	237.4	67.3	.0	99.5	19.3	186.1	20.6	9.6	30.2	11.5	9.6
Jan. 1, 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
1936-37											
Sept. 1	250.8	81.0	.0	104.1[a]	18.3	203.4	23.7	8.0	31.7	8.0	7.7
Oct. 1	281.8	82.8	.0	133.4[a]	19.0	235 2	29.0	6.1	35.1	4.5	7.0
Nov. 1	268.9	76.4	.0	121.7[a]	22.3	220.4	34.0	7.2	41.2	1.8	5.5
Dec. 1	250.8	70.3	.0	99.2[a]	24.0	193.5	38.8	7.4	46.2	6.7	4.4
Jan. 1	267.1	62.4	.0	81.6[a]	27.8	171.8	35.9	9.0	44.9	44.5	5.9

* 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 (4 to 13 million bushels) deducted from officially published totals to insure comparability with data for preceding months.

TABLE V.—UNITED STATES FLOUR PRODUCTION, EXPORTS, AND NET RETENTION, MONTHLY, JULY–DECEMBER 1936, WITH COMPARISONS*

(Thousand barrels)

Month or period	Production						Net exports and shipments to possessions			Estimated net retention		
	All reporting mills			Estimated total								
	1934	1935	1936	1934	1935	1936	1934	1935	1936	1934	1935	1936
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	8,017[a]	8,643	8,646	8,378[c]	432	302	306	8,211	8,344	8,072[a]
Dec.	7,547	7,175	7,820[b]	7,944	7,497	8,170[c]	354	294	300[c]	7,590	7,203	7,870[a]
July-Dec.	49,740	49,870	52,229[a]	52,386	52,111	54,576	2,517	1,877	2,113[a]	49,869	50,234	52,463[a]
July-June[d] ...	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] Preliminary.
[b] Estimated from data in the *Northwestern Miller.*
[c] Predicted.
[d] Twelve months beginning in year stated.

TABLE VI.—INTERNATIONAL SHIPMENTS OF WHEAT AND FLOUR, WEEKLY FROM SEPTEMBER 1936*

(Million bushels)

Week ending	Total	Shipments from							Shipments to Europe				To ex-Europe		
		North America	Argentina[a]	Australia	South Russia	Danube	India	Other countries[b]	Total	United Kingdom	Orders	Continent	Total	U.S.	Others
1936															
Sept. 5	9.24	5.07	.81	1.36	.00	1.64	.04	.32	6.44	2.86	.91	2.67	2.80	1.26	1.54
12	12.00	5.62	1.34	.96	.00	3.88	.07	.13	9.37	3.40	1.55	4.42	2.63	.94	1.69
19	12.22	5.88	.95	1.84	.00	3.14	.21	.20	9.26	3.98	1.86	3.42	2.97	1.20	1.77
26	10.89	4.75	.79	2.18	.00	2.14	.75	.28	8.60	2.68	1.99	3.93	2.29	.74	1.55
Oct. 3	11.51	5.37	1.15	1.38	.00	3.31	.17	.13	8.68	3.15	1.42	4.11	2.83	1.00	1.83
10	10.40	6.51	.47	.79	.09	2.24	.15	.15	8.04	3.55	1.47	3.02	2.36	1.28	1.08
17	10.42	4.41	1.57	1.54	.00	2.33	.42	.15	7.98	3.34	1.26	3.38	2.43	.83	1.60
24	12.44	5.18	1.98	1.06	.00	3.29	.81	.12	9.11	2.87	2.02	4.22	3.33	1.11	2.22
31	12.12	6.15	1.10	1.59	.00	3.02	.18	.08	9.89	3.76	1.66	4.47	2.23	.70	1.53
Nov. 7	12.48	5.78	1.60	1.74	.00	2.23	.88	.25	10.09	3.94	2.85	3.30	2.38	.83	1.55
14	12.98	6.98	1.34	1.65	.00	2.68	.25	.08	10.84	3.10	2.96	4.78	2.14	.65	1.49
21	8.99	5.05	1.07	.98	.00	1.46	.35	.08	7.36	2.69	2.13	2.54	1.63	.48	1.15
28	11.33	6.63	.96	1.15	.00	1.67	.86	.06	9.06	3.07	2.01	3.98	2.27	.63	1.64
Dec. 5	12.20	6.61	1.33	1.82	.00	1.82	.54	.08	9.87	3.20	1.63	5.04	2.33	.51	1.82
12	8.55	4.82	1.05	1.60	.00	.63	.38	.07	6.37	2.30	1.74	2.33	2.18	1.12	1.06
19	9.44	4.22	1.83	1.27	.00	1.95	.07	.10	6.98	2.53	1.21	3.24	2.46	.83	1.63
26	11.23	3.70	3.24	2.07	.00	1.82	.32	.08	8.78	2.70	3.02	3.06	2.45	.75	1.70
1937															
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[c]	10.57	3.05	3.93	1.99	.00	.93	.11	.56	....	....	....	....	....	...	....
16[c]	12.35	2.83	5.71	1.71	.00	1.40	.00	.70	....	....	....	....	....	...	....

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

[a] Including Uruguay. [b] "North Africa, France, Germany, Sweden, etc." [c] Preliminary.

TABLE VII.—NET IMPORTS OF WHEAT AND FLOUR, MONTHLY FROM JULY 1936*

(Million bushels)

Month or period	United Kingdom	Irish Free State	France[a]	Italy	Germany	Czechoslovakia	Austria	Switzerland	Belgium[b]	Netherlands	Denmark	Norway	Sweden	Portugal
July	16.99	1.92	(.05)	...	(.30)	.01	.80	1.64	3.31	1.95	1.15	.38	(.36)	.01
Aug.	14.89	1.07	(.07)	...	.09	(.00)	.77	1.22	3.94	1.56	.46	.53	(.60)	.03
Sept.	15.25	.53	.49	...	.06	(.03)	1.33	1.55	4.84	1.58	.61	.26	(.13)	.01
Oct.	17.39	1.64	.49[d]	...	.12	.00	.90	1.61	3.31	1.47	.81	.76	(.01)	.01
Nov.[c]	18.39	1.42	.94[d]	...	.16	(.19)	...	1.59	4.32	1.35	.66	.58	.17	...
Aug.-Nov. 1936[c]	65.92	4.66	1.85	...	.43	(.22)	3.60	5.97	16.41	5.96	2.54	2.13	(.57)	.06
1935	68.72	4.55	6.04	...	.49	2.15	1.92	6.43	13.90	8.71	2.61	2.49	(.79)	.24

Month or period	Poland	Lithuania	Latvia	Estonia	Finland	Greece	Syria, Lebanon	Egypt	Japan	Manchukuo	China	Cuba[f]	South Africa	New Zealand
July	(.47)	.00	(.08)	(.03)	.51	1.63	(.12)	.02	.52	.90	.16	.37	.01	.03
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	....	(.32)	...	.17	...	(.13)	.27	.01	.01
Nov.[c]	(.63)	.00	.00	.00	.18	....	...	...	(.21)	...	...	.39	...	...
Aug.-Nov. 1936[c]	(3.26)	.00	.00	.00	1.12	6.00	(.85)	.03	1.11	2.50	(.85)	1.40	.01	.25
1935	(2.28)	(.44)	(1.35)	(.07)	1.40	5.51	(.01)	.07	(.35)	5.39	2.76	1.56	.03	.33

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

[a] Net trade in "commerce général." [d] Net trade in "commerce spécial."

[b] Including Luxemburg. [e] Including our estimates for missing monthly data.

[c] Figures preliminary for many countries. [f] Gross imports of flour from unofficial sources.

TABLE VIII.—NET EXPORTS OF WHEAT AND FLOUR, MONTHLY FROM JULY 1936*

(Million bushels)

Month or period	United States[a]	Canada	Australia	Argentina	Chile	Hungary	Yugoslavia	Rumania	Bulgaria	Morocco	Algeria	Tunis	India	USSR
July	(3.67)	27.90	5.18	4.51	...	2.98	.08	.28	.15	.06	.57	.08	.23	.12
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	6.24	...	2.59	2.10	5.31	1.16	(.37)		(.03)	2.07	.39
Nov.[b]	(2.81)	35.11[c]	5.58	4.74	...	2.54	1.70	....	.61	(.26)	1.16	...	2.33	...
Aug.-Nov. 1936[d]	(14.12)	109.28	23.57	19.32	.00	12.03	9.11	21.00	3.47	(.63)	4.07	(.10)	6.30	1.20
1935	(14.37)	102.45	29.23	35.05	.36	6.54	.05	4.41	.87	1.74	3.97	2.98	.72	22.00

* For general notes see Table VII. Here, figures in parentheses represent net imports.

[a] Including shipments to possessions.

[b] Figures preliminary for many countries.

[c] Gross exports for December were 22.6 million bushels.

[d] Including our estimates for missing monthly data.

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 Nov. 30	From Dec. 1	
	A. UNITED STATES (JULY–JUNE)											
1931-32	313	937	1,250	474	80	+194	748	502	127[d]	64	63	375
1932-33	375	757	1,132	481	81	+156	718	414	36	23	13	378
1933-34	378	552	930	435	76	+117	628	302	28	4	24	274
1934-35	274	526	800[e]	443	82	+130	655	145	(1)[f]	2	(3)[f]	146
1935-36	146	626	772[e]	458	88	+117	663	109	(28)[f]	(15)[f]	(13)[f]	137
1936-37	137	626	763[e]	460	96	+117	673	90	(25)[f]	(18)[f]	(7)[f]	115
	B. CANADA (AUGUST–JULY)											
1931-32	134	321	455	42	37	+37	116	339	207	82	125	132
1932-33	132	443	575	44	36	+19	99	476	264	121	143	212
1933-34	212	282	494	43	33	+30	106	388	194	84	110	194
1934-35	194	276	470	43	32	+27	102	368	165	80	85	203
1935-36	203	282	485	43	33	+46	122	363	254	102	152	109
1936-37	109	229	338	43	35	+25	103	235	200	109	91	35
	C. AUSTRALIA (AUGUST–JULY)											
1931-32	60	191	251	32	16	− 3	45	206	156	33	123	50
1932-33	50	214	264	33	16	+10	59	205	150	27	123	55
1933-34	55	177	232	33	13	+15	61	171	86	26	60	85
1934-35	85	133	218	32	13	+ 7	52	166	109	34	75	57
1935-36	57	143	200	33	13	+ 9	55	145	103	29	74	42
1936-37	42	134	176	33	14	+ 9	56	120	90	24	66	30
	D. ARGENTINA (AUGUST–JULY)											
1931-32	80	220	300	65	24	+ 6	95	205	140	25	115	65
1932-33	65	241	306	65	24	+10	99	207	132	15	117	75
1933-34	75	286	361	66	23	+ 7	96	265	147	33	114	118
1934-35	118	241	359	69	17	+ 6	92	267	182	63	119	85
1935-36	85	141	226	69	21	+ 6	96	130	70	35	35	60
1936-37	60	250	310	69	22	+ 9	100	210	145	19	126	65

* 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.

TABLE X.—SELECTED WHEAT PRICES, WEEKLY FROM SEPTEMBER 1936*

(*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)
	Dec.	May[a]	Dec.	May	Dec.[b]	Dec.	May						
1936													
Sept. 5	108	104	95	97	100	109	107	113	119	114	140	120	93
12	113	109	99	101	100	111	110	114	123	118	143	140	94
19	117	112	104	106	99	112	112	116	122	120	144	138	96
26	121	116	109	110	100	116	114	119	126	121	149	148	98
Oct. 3	118	111	106	108	97[b]	114	112	117	122	119	147	151	96
10	120	113	108	110	98	114	113	118	122	121	148	157	97
17	125	117	112	112	100	116	115	119	125	122	150	157	99
24	122	114[a]	109	110	96	115	113	118	122	121	148	147	98
31	120	112	108	108	94	115	113	118	120	118	149	156	99
Nov. 7	117	110	106	107	92	115	113	118	121	122	149	155	..
14	117	112	106	107	92	116	113	119	121	121	144	153	..
21	118	113	106	108	92	118	115	120	123	124	144	143	..
28	120	114	107	108	93	118	116	121	123	123	141	135	..
Dec. 5	128	119	112	113	96	124	120	126	128	127	139	175	..
12	132	122	114	116	96	128	123	130	130	130	155	154	108
19	140	129	124	124	99[b]	137	131	139	137	137	162	183	113
26	142	128	125	125	97	138	133	140	141	141	163	178	114
1937													
Jan. 2	150	132	128	128	100	...	135	141	143	143	176	180	115
9	...	131	...	128	99	...	133	138	141	143	167	180	...
16	...	130	...	127	98	...	134	140	...	...	...	...	...

Week ending	British parcels		Liverpool (Tuesday prices)				European domestic				Winnipeg		Buenos Aires 80-kilo
	U.S. cents	Gold cents	No. 1 Man.	No. 3 Man.	Arg., Rosafé[c]	Australian	Great Britain	France[d]	Germany[d]	Italy[d]	Wtd. average	No. 3 Man.	
1936													
Sept. 5	104	62	111	108	113	117	98	251	214	263	96	92	102
12	110	65	116	111	110	119	97	251	214	263	100	96	101
19	115	68	119	116	113	118[e]	100	251	214	263	104	101	100
26	118	70	124	121	116	120	103	251	214	262	110	114	101
Oct. 3	112	67	125	120	115	118	105	179	217	249	107	104	98
10	115	68	126	122	113	118	108	179	217	176	109	106	102
17	120	72	130	126	119	125	111	179	217	176	113	110	106
24	122	73	131	126	117	125	114	179	217	176	110	106	102
31	118	70	128	124	115	123	117	178	217	176	109	105	97
Nov. 7	115	68	124	120	112	117	114	179	219	176	107	104	94
14	115	68	124	120	112	116	113	180	219	176	107	104	95
21	113	67	124	121	112	116	111	180	219	176	108	105	96
28	115	69	125	120	113	117	110	180	219	178	107	104	96
Dec. 5	121	72	134	130	119	127	111	181	228	178	110	106	97
12	124	74	141	136	121	132	113	181	228	178	113	109	96
19	132	78	149	144	129	143[f]	116	182	228	178	122	119	..
26	132	78	151	146	129	140	119	182	228	...	124	121	..
1937													
Jan. 2	133	79	156	151	133	141	125	183	228	...	126	124	..
9	...	..	154	150	133	141	...	183	228	...	127	124	..

* 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] March future through Oct. 17.

[b] Nov. future through Sept. 26; Feb. future after Dec. 12.

[c] New crop; duty-paid.

[d] Fixed prices; sharp reduction in France and Italy in October due to currency devaluation.

[e] New crop Sept. 19 and following.

[f] Parcels to London.

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