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WORLD WHEAT SURVEY AND OUTLOOK JANUARY 1943

M. K. Bennett, Helen C. Farnsworth, and V. P. Timoshenko

The tide of warfare turned in favor of the United Nations during September–January. The shifting of territorial control only slightly curtailed wheat supplies immediately available to Axis-controlled areas of Europe, but German prospects for future supplies from southeastern Russia are vanishing. To Soviet Russia the shifting meant greater immediate stringency of bread supplies but a gain of resources for the future. The shipping situation remained tight. The volume of overseas trade in wheat and flour during August–January foreshadows a crop-year total as small as in 1941–42.

The four chief exporting countries had unprecedentedly large wheat supplies available for 1942–43. Only in the United States are these disappearing with unusual rapidity. The outward carryover, while likely to be the largest on record, will be smaller than was earlier expected. Wheat is being economized in the British Isles, but shortage is not in prospect. In Continental Europe, the supplies of 1942–43 were the smallest in four years of war, and many countries struggle increasingly with shortages. The supply position of Soviet Russia, now uncomfortable rather than desperate, seems likely to worsen before the next harvest unless numerous problems of transport can be solved. Wheat shortages are reported in the Middle East, India, and China, in considerable degree a result of disturbances of transport and hoarding.

Market prices of wheat in the United States, already far above those in competing exporting countries, fluctuated in reflection of an intra-governmental controversy about the level of wheat price appropriate for a ceiling. Flour-price ceilings were fixed by the OPA at a level which would reflect to wheat less than parity price reckoned on the accepted formula. But this action failed to close the controversy. Legislative elements continue to press for wheat prices no lower than accepted parity plus labor costs.

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The tide of warfare swung in favor of the United Nations during the months under review, September 1942 to January 1943. In the Far East, an Australian-American offensive against the Japanese in New Guinea begun in September was successfully concluded in January; American naval and air forces defeated the Japanese in a series of heavy engagements around Guadalcanal; and, in December, British forces from India began an advance into Burma. Madagascar came fully under Allied control early in November. On the North African front, the British Eighth Army began to press westward from Egypt late in October and had traversed Libya almost to the Tunisian border within three months. British and American sea-borne troops occupied French Morocco and Algeria beginning November 7, later pressing eastward into Tunisia. The Nazis meanwhile overran unoccupied France, but failed to acquire more than a fraction of the French fleet, much of which was scuttled by its own personnel while at anchor at Toulon. On the Russian front, the Soviet winter offensives began in mid-November. By the middle of February, the great bulk of the territory overrun by Axis forces during the summer and autumn had been recovered. Alignment of all of French Africa except Tunisia with the United Nations added a vast area to the territory under Allied control.

These events, important as they were from the military point of view, carried less impressive implications for the world wheat situation. The wheat-supply position of Axis-dominated Europe was only slightly worsened by loss of Morocco and Algeria as sources of supply. The loss of phosphate fertilizer—and corresponding gain to the United Nations—was perhaps more important than the losses and corresponding gain of wheat. The Allies

gained a significant source of edible fats in French West Africa. Reconquest of territory presumably weakened the immediate bread-grain position of the USSR, since additional mouths to feed were gained without equivalent gain of bread-grain supplies.

Stringency in the shipping situation unquestionably continued, and may well have intensified. The output of new merchant vessels in the United States was enormous, around 5 million deadweight tons in September-January. Sinkings were presumably not as large, for Prime Minister Churchill has stated that the merchant fleet of the United Nations was 1¼ million gross tons larger at the end of January than it had been six months before. But demands upon shipping space have unquestionably increased also, partly in consequence of the growth of American forces overseas. The need for utmost economy in use of ships continues. Faint indications of easing appeared, however, in quotations for marine-insurance rates on cargoes. On several routes—for example, from the eastern United States seaboard to Egypt via the Cape of Good Hope, and to Australia via the Panama Canal—insurance rates declined from peaks reached in August. But rates to the United Kingdom and Spain-Portugal remained unchanged. If and when the Allies oust Axis forces from Tunisia, their last foothold in Africa, many ships now traversing the long route from the American east coast and Britain to the Middle East and India will presumably use the much shorter route via the Mediterranean.

The volume of overseas trade in wheat and flour was decidedly small in the first six months of 1942-43, probably even lower than in corresponding months of 1941-42. Reported shipments from Argentina through December were about the same this year as

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last; but the combined (unreported) exports from Canada, the United States, and Australia must have been smaller for the current period. The policy of Britain, the dominant open import market, was apparently to economize on inshipments of wheat; Continental outlets continued small; Oriental outlets were closed. Only the Middle East and the USSR imported appreciably more wheat than usual. Canada continued to be the principal source of British imports. The volume of wheat sunk en route is not ascertainable but was presumably heavy in relation to quantities shipped.

Wheat supplies for 1942-43 are unprecedentedly abundant in the four chief exporting countries, but governmental controls prevent prices in North America from reflecting the surplus conditions. Wheat is being economized in the British Isles, though shortage threatens only if importation should be checked. Most countries of Continental Europe struggle with shortages. Total Continental supplies from inward carryover and new crop seem smaller in 1942-43 than in either of the two preceding years. The bread-grain position of Soviet Russia seems uncomfortable but not desperate. Reconquest of territory and short supplies of other foods formerly obtained from lost territories make for stringencies in the total food supply, and transport difficulties make for local shortages. India harvested a good wheat crop last February-May and a large rice crop in the autumn of 1942, and has exported little. Reported local grain shortages reflect not only curtailment of rice imports, but also difficulties in internal distribution. Advices from China suggest a good wheat crop for the country as a whole, with famine nevertheless raging locally.

SUPPLIES IN MAJOR REGIONS

Aggregate wheat supplies of 1942-43 in the four major exporting countries are almost incredibly large. Now that the new harvests of Argentina and Australia are approximately known, total supplies of the major exporters add up to about 3,380 million bushels, including about 1,420 million of old-crop wheat and 1,960 million of new crop. The following table

gives data for the four years of war in contrast with the average for five prewar years.

WHEAT SUPPLIES AND DISPOSITION IN THE FOUR MAJOR EXPORTING COUNTRIES, PREWAR AND FROM 1939-40*
(Million bushels)

Crop year ^a	Initial stocks	New crop	Total supply	Domestic use	Surplus	Exports
1934-39 av. . .	412	1,378	1,790	952	838	435
1939-40.	636	1,613	2,249	956	1,293	504
1940-41.	789	1,734	2,523	956	1,567	451
1941-42.	1,116	1,649	2,765	974	1,791	370
1942-43.	1,421	1,975	3,378	...	.....	...

* United States, Canada, Argentina, Australia. See Table IV.

^a July-June for the United States, August-July for other countries.

Year by year since the war began, exports have fallen, domestic use has remained approximately stable, and wheat crops have been large despite some efforts toward "production control." Carryovers have therefore increased tremendously. The enormous total supply of 1942-43 represents the combination of the largest carryover in history with the second largest crop in history, smaller only than that of 1928. Aggregate supplies for 1942-43 would be large enough to cover domestic use for three years and leave a normal carryover¹ as well; or to provide for a year's domestic use, a normal carryover, and exports more than four times the annual average exports of the five prewar years; or to provide for a year's domestic use, a normal carryover, and exports well over twice as large as the biggest ever shipped in a single year (1928-29).

With war continuing, exports must continue small in 1942-43. Therefore the supplies available for domestic use and outward carryover run far higher than ever before. At present interest attaches chiefly to the question how far domestic use can be expanded. The governments of the exporting countries, able to do very little toward expanding export outlets, are inevitably concerned to swell domestic use of wheat, to hold down carryovers, and more remotely to restrain production in 1943.

¹ Assuming that a "normal" carryover approximates 300 million bushels.

Such policies are nevertheless difficult to formulate or to press strongly because producers' interests lie in higher prices and because a large stock of wheat in exporting countries seems desirable in looking forward to supplying food to hungry peoples of Europe when large-scale relief becomes feasible.

Supplies reached record heights in 1942-43 not only in the four major exporters as a group, but also in each of these countries. The degree of excess above average differed, however, from one to the other. Total supplies were about double their average in the four countries together. They were nearly treble their average in Canada, a little less than double in the United States, but only 42 per cent above average in Argentina and 40 per cent above in Australia.

For the world as a whole, the broad picture is one of abundance of wheat, but of abundance localized in the major exporting countries and a few others while scarcity prevails in a great many regions. The war disrupts not only ocean traffic in wheat, but internal transport as well. Residents of cities may lack wheat while farmers in the same country have plenty. Appraisal of the year's supplies on the basis of production statistics, so far as they are available, thus tends to yield less information than was true in peacetime about availability of wheat to consumers. On the other hand, reports or rumors of consumer shortages from countries that issue no statistics of wheat supply are likely to provide unreliable indications of the volume of supply physically in existence.

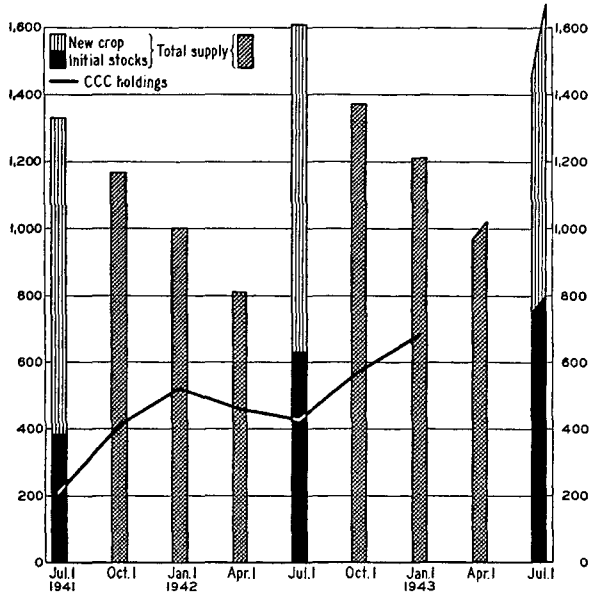
UNITED STATES

The enormous wheat supplies of the United States for 1942-43, some 1,600 million bushels from inward carryover and new crop, were not so huge as to guarantee relative abundance of all types. Soft red winter wheat is relatively scarce, since the new crop of that type was short. Price premiums developed early, substitutable soft wheats were moved eastward by rail from the Pacific Northwest, and the Commodity Credit Corporation (CCC) mitigated the shortage by exchanging some of its stocks of soft red winter for types more abun-

dant in supply.¹ These exceptional developments were of minor significance, however, in their bearing upon the principal problems of disposition and price.

Disposition of supplies.—Quarterly changes in the supply position since July 1, 1941 are summarized broadly in Chart 1. During 1941-

CHART 1.—UNITED STATES TOTAL WHEAT SUPPLIES, AND CCC HOLDINGS, QUARTERLY FROM JULY 1941*
(Million bushels)



* Latest official data of U.S. Department of Agriculture on stocks in all positions (for July 1 old-crop stocks plus new crops). CCC holdings include wheat under loan and owned or pooled.

42, total statistical disappearance aggregated 696 million bushels, of which 327 million disappeared during July-December and 369 million during January-June. July-December disappearance of about 398 million bushels in 1942-43 was apparently about 71 million bushels—some 22 per cent—larger than in the corresponding period of 1941-42. These calculations of total disappearance may include various errors of estimate in crops and stocks, but they strongly suggest a considerably higher level of July-December disappearance in 1942-43 than in 1941-42.

Wheat disappears as net outflow from the nation or for domestic uses principally as

¹ Cf. WHEAT STUDIES, September 1942, XIX, 4.

seed, as mill grindings for flour, as feed, and as industrial raw material including latterly raw material for manufacture of industrial alcohol.

Seed use for winter-wheat sowings was nearly a million bushels smaller this year than last. The area sown to winter wheat in the autumn of 1942 is officially estimated at 37.5 million acres, slightly less than the area sown in the autumn of 1941.

We infer that the net outflow of wheat and flour has not been appreciably larger in July–December this year than last. The probable volume in either year is difficult to appraise in the absence of trade statistics. The transfer of large armed forces to foreign shores has complicated the picture, since these are in some part supplied with home-produced flour which would not be designated technically as “exports.” The probability is that the net outflow of domestic wheat and flour in July–December 1941–42 ranged between 10 and 15 million bushels. Unless huge stockpiles have been built up for the armed forces abroad, the flour used by an armed force even of a million men in July–December 1942, figured at half a pound of flour per man per day, would not have exceeded the equivalent of 2.1 million bushels of wheat. A substantial part of what has been used was in fact furnished by Britain and Australia.

Subsidized export sales of wheat grain from stocks of the CCC in these months are reported as only half a million bushels. Shipments on lend-lease account during July–November, while about double those of corresponding

¹ Rates of subsidization on flour remained unchanged at \$1.25 per barrel until January 28, when an increase to \$1.60 became effective. There was no subsidy on wheat until December 2, when a rate of 20 cents per bushel became effective. This was raised to 25 cents on January 12.

² Shipments under subsidy to Mexico could not have been made in significant volume during July–December, since the substantial sale of over 5 million bushels was not concluded until late in January.

³ Only in small degree can it reflect mill output of the “granular flour”—presumably reported as flour produced—which has recently begun to be produced for distillers of industrial alcohol, but does not move to human consumption as did most flour formerly reported. Very little of the granular flour can have been produced during July–December, since less than 2 million bushels of wheat were used during the experimental period of November–December.

months of 1941, were only 1.37 million bushels of wheat and flour. Subsidized exports of non-CCC wheat grain and wheat flour to foreign countries, while not reported, seem most unlikely to have run larger this year than last. Shipping space has been scarcer and rates of subsidization no higher.¹ Shipments to possessions can hardly have been much larger, considering the difficulties of supplying Puerto Rico. Unsubsidized commercial exports must have been very small in both years because of the much higher level of wheat and flour prices in the United States than in competing exporting countries. The volume of exports of flour milled in bond from Canadian wheat is not significant in measuring the net outflow from the country, since the imports of wheat offset the exports of flour.

The most uncertain feature of the calculation is the probable volume of subsidized exports, no doubt mostly flour milled from domestic wheat.² If these were as large this year as last, which seems doubtful, it may be reasonable to conclude that the total net outflow of wheat-grain equivalent was either a trifle smaller or a trifle larger in the first six months of 1942–43 than in the same months of 1941–42. In either event, it is altogether unlikely that enlarged disappearance in the channel of net outflow from the nation accounts for as much as 5 million bushels of the enlarged total disappearance of wheat (some 70 million bushels) in July–December this year as compared with last.

The increase in disappearance seems attributable rather to enlargement of mill grindings, of feed use, and of use for manufacture of industrial alcohol. Among these avenues of disposition, feed use was doubtless the most important quantitatively.

Mill grindings in July–December may be estimated as some 17–19 million bushels larger this year than last—an increase of about 7–8 per cent. Hence enlarged mill grindings contributed appreciably to the enlargement of total disappearance. Flour production has risen correspondingly. Since the “export” flow of flour presumably has not increased, the rise in flour output suggests either an increase in domestic per capita flour consumption, or an enlargement of flour stocks.³ Genu-

inely reliable evidence concerning increase either of flour stocks or of per capita flour consumption is not yet available, and will not appear for some months. We are inclined to believe that both have occurred, but see no present possibility of measuring either with reasonable presumption of accuracy. Increase of per capita flour consumption between July–December 1941 and 1942, however, is not likely to have been as large as the increase of 7–8 per cent in flour output.

The use of wheat for manufacture of industrial alcohol has risen greatly, especially since September. Only 3.5 million bushels were sold by the CCC for this purpose during the twelve months of 1941–42, and only about 3 million in July–August 1942. But in September–December 1942, the total reached 18 million. Although not all of the CCC sales of wheat for alcohol may actually have been used in the manufacturing process during July–December, there can be little question that physical utilization has run much larger this year than last, contributing substantially to increased aggregate wheat disappearance. Until December, the wheat sold for alcohol went to distilleries, apparently without prior processing. In mid-December, the CCC launched a program whereby flour millers might contract to purchase wheat from the CCC at specified prices ranging a few cents above 80 cents per bushel, and to produce a granular flour in specified weekly quantities, selling it to distillers at specified prices. The granular flour can be used by distillers who have no grain-grinding facilities; there are manufacturing advantages in the granular flour over the raw material of wheat made by distillers themselves; and the bran and shorts produced in the granular-flour process are better feeds than the residues of wheat obtained by distillers in their grinding process. Under the contracts with CCC, millers retain the bran and shorts and sell them at prevailing prices, which are to be supported. Wheat used for alcohol in the crop year 1942–43 may reach or slightly exceed 45 million bushels.

Of the total increase of some 70 million bushels in wheat disappearance between July–December 1941 and 1942, perhaps about half can be accounted for by increases in mill

grindings and use for industrial alcohol. The remaining half presumably reflects mainly increased use of wheat for feed.

Direct evidence of enlarged feed use lies in the fact that CCC sales of feed wheat were 61 million bushels in July–December 1942, in contrast with sales of only 36 million in the whole of 1941–42. This increase of CCC sales is, however, an uncertain guide to total use of wheat for feed, since much is used directly on farms, some is purchased at market prices by feed-mixing establishments, and some may have been stored rather than used. There is no statistical evidence concerning these matters. However, with the strong emphasis put upon livestock and poultry in the national food-production program and with high livestock prices, farmers have strong incentives to feed wheat in exceptional quantity this year. The legislative limit on CCC sales of sound wheat for feed at cut prices is 125 million bushels for the crop year. It seems likely that sales will reach the limit.¹ To this must be added CCC sales of deteriorated grain, in quantities not reported but augmented by special purchases of poor-quality spring wheat following the harvest; and farm feeding of wheat not marketed. The total for the crop year may well be extraordinarily large, perhaps over 200 million bushels. In 1941–42 domestic disappearance of wheat for all purposes except mill grinding and seed was about 130 million bushels. It may run nearly twice as high in 1942–43. If so, total domestic disappearance may approximate 800 million bushels. If net exports are about the same as last year's (some 27 million bushels) or moderately larger, the probable range of outward carryover may be placed as 750–800 million bushels, an increase of 120–170 million bushels in the course of the year. Current official calculations place prospective carryover lower and prospective disappearance higher.

The importance of the CCC in the wheat situation of the United States is suggested by Chart 1 (p. 123). Its combined holdings of wheat owned and wheat under loan on January 1, 1943, were apparently 680 million

¹ The present limit may be exceeded if the Congress should enact legislation permitting additional sales at 85 per cent of corn parity.

bushels as compared with 520 million a year before.¹ The proportion of total stocks controlled by the CCC was 56 per cent in 1943 as against 50 per cent in 1942.

A prospective outward carryover of 750–800 million bushels would be much the largest on record. It foreshadows for the crop year 1943–44 another year of exceptionally abundant total supply. The crop to be harvested next summer cannot of course be forecast now except within very wide margins of error. The condition of winter wheat was exceptionally good on December 1, and was officially interpreted as indicating a probable crop of 624 million bushels on the low acreage sown. If Secretary Wickard's announced goal of 52.5 million acres sown for the crop of 1943 is not exceeded, the sown spring-wheat acreage will also be notably low, about 15 million acres.² Soil-moisture conditions appear to be favorable in the major spring-wheat regions. If one counts upon winter-wheat production within 10 per cent of December 1 indications, upon spring-wheat yield per acre within 10 per cent of the average in non-drought years, and upon a spring-wheat acreage as low as 15 million acres, the total crop of 1943 might range between 710 and 870 million bushels. The lower crop plus the lower carryover would suggest the possibility of a total supply approximating 1,460 million bushels for 1943–44, a reduction of about 150 million bushels from the supplies of 1942–43 but otherwise the largest in history. The larger crop and the higher carryover would suggest total supplies of about 1,670 million bushels for 1943–44, a new high record (Chart 1, p. 123).

Price developments.—The period under review was notable for an intra-governmental struggle over the monetary level of maximum price appropriate to be imposed upon farm or

market prices of wheat grain. Elements in the Congress, especially the farm bloc, together with some of the farmers' organizations, pressed for a decidedly high level. Various elements in the Administration, especially the Office of Price Administration (OPA), pressed for a lower level. Proponents and opponents were in general agreed upon the broad principle of applying anti-inflationary action to wheat. Proponents and opponents alike appear to have accepted in principle the notion that some sort of a "parity price" ought to become the "ceiling price."

But controversy raged about definition of parity price or of ceiling price in monetary terms. At one extreme, Congressional proponents of high wheat prices, as exemplified by provisions in the Pace Bill,³ pressed for revision of the parity formula in such a way as to include all costs of farm labor. It was estimated that this new formula would result in a price some 10–13 per cent above the parity price as calculated by the established formula. At the other extreme, proponents of relatively lower wheat prices were inclined to press for the interpretation of ceiling price as parity price minus per-bushel parity and soil-conservation payments to farmers. These amount to about 23.4 cents a bushel for 1942–43,⁴ so that the wheat-ceiling price under contemplation was parity price less about 23 cents. The parity price itself, according to the accepted formula, would have been in September about \$1.48 per bushel for an ordinary grade of wheat (No. 2 Hard Winter) deliverable on futures contracts at Chicago. The controversy accordingly centered about the question whether the ceiling price of wheat, if and when it should be imposed, should be about \$1.65 or \$1.25 a bushel for a deliverable grade at Chicago.

Ceiling prices on bread at retail had been established in May 1942, at levels prevailing the preceding March. Ceiling prices on flour were first imposed by the OPA, effective October 5, at the highest level of deliveries made by individual millers and blenders during the period September 28 to October 2. This ceiling was announced as temporary, to endure for 60 days. As of October 8, the regulation was revised to permit sellers to reckon their

¹ The CCC has issued statements of holdings under different methods of compilation, so that comparisons of holdings between one date and another are not exact.

² Relaxation of restrictions to facilitate increased production of wheat for feed use is within the bounds of possibility.

³ H.R. 1408, 78th Cong., 1st Sess.

⁴ On normal yield on allotted acreage, not the amount actually produced. See WHEAT STUDIES, May 1942, XVIII, 366.

ceiling prices not only on deliveries during the period September 28 to October 2, but also on sales for forward delivery made during the same period. On December 3, the same ceiling was extended. On December 29, announcement was made of imposition of permanent ceiling prices on flour, effective on January 4. These prices were made uniform as between sellers in specified regions for specified types of flour, and were stated in specific monetary terms. The OPA calculated the new dollars-and-cents prices to average 10 per cent higher than the earlier temporary ceilings based on September 28–October 2 sales.

In order that the increased ceilings on flour might not “squeeze” too strongly bakers operating under unchanged ceiling prices on bread, the Food Distribution Administration (FDA) on December 30 issued its first order, regulating bakers in ways intended to reduce their manufacturing costs. Effective January 18, restrictions were placed upon slicing, packaging and wrapping, the number of types of bread and rolls manufactured, the preparation of labor-consuming types, acceptance of returns of stale bread, and procurement of additional equipment. The order further required, though not with intention of reducing costs of manufacture, that all white bread should be enriched; but enrichment of family flour was not imposed on millers. Since much family flour was already enriched, the new regulation of bakers means that all but a small fraction of the white-wheat-flour products consumed in the United States will soon be enriched.

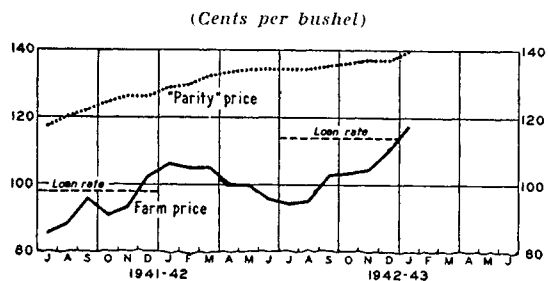
Also on December 30, the CCC announced that it would support millfeed prices at \$1.50 per ton below OPA ceiling prices, which had been imposed the preceding May. This step was designed to assist millers to pay higher prices for wheat than might be possible under circumstances of ceiling prices on flour, rising prices of wheat, and falling prices of millfeed.

The temporary freezing of flour prices on October 3 followed immediately upon approval of the so-called Second Price Control Act (or Anti-Inflation Act) on October 2.¹ This act in substance specified, so far as con-

cerns wheat, that no maximum price should be established on wheat or wheaten products that would fail to reflect to producers either parity price or the highest prices received by producers between January 1 and September 15, 1942. The act further specified that “a generally fair and equitable margin” should be allowed for processors, and that in the fixing of price maximums, “adequate weighting” should be given to farm labor. An executive order dated October 3² stated that, so far as practicable, the prices of wheat or wheaten products should be stabilized at the levels prevailing on September 15, and that “appropriate deductions” for conservation and parity payments and subsidies should be made from parity prices in establishing, maintaining, or adjusting the maximum (ceiling) prices. The OPA, on promulgation of permanent maximum prices of flour effective January 4, stated that the flour prices were consistent both with the executive order and the act. The view of some members of the Congress was that the act had been flouted both in the presidential directive and in the OPA regulation.

Wheat prices were not placed under ceilings in the period under review. Farm prices (as of the 15th of each month) rose strongly from August to September, slightly from September to November, and again strongly from November to January. By January 15, as shown in Chart 2, farm prices exceeded the CCC loan

CHART 2.—UNITED STATES AVERAGE FARM PRICES, PARITY PRICES, AND LOAN RATES FOR WHEAT, MONTHLY FROM JULY 1941*



* Data of the Bureau of Agricultural Economics.

rate, set before the crop year opened at 85 per cent of parity. As of that date, the farm price at \$1.18 a bushel stood 22 cents below the parity price calculated by the established

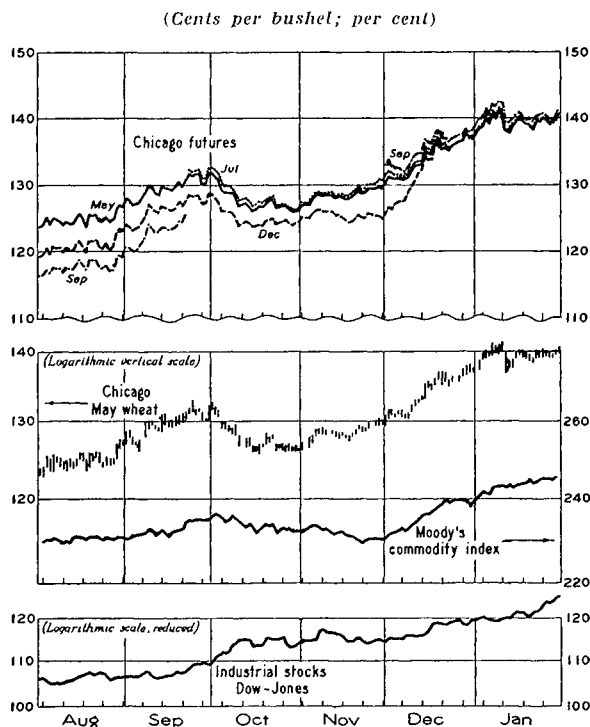
¹ Public No. 729, 77th Cong.

² Executive Order 9250.

formula, the nearest approach in any month since August 1937, though only a cent closer than in January 1942. If the parity price should be taken on the administrative interpretation of old parity minus conservation and parity payments, the actual farm price on January 15 stood at or slightly above what may be called "administrative parity."

The course of wheat prices (futures) at Chicago from day to day is shown in Chart 3.

CHART 3.—CHICAGO WHEAT FUTURES PRICES, AND INDEX NUMBERS OF PRICES OF SENSITIVE COMMODITIES AND STOCKS, DAILY FROM AUGUST 1942*



* In the upper section are plotted closing prices from *Chicago Journal of Commerce*.

In the lower section are high and low prices of the May wheat future; index of closing prices of 15 sensitive commodities, base December 1931 = 100, compiled by Moody's Investors Service; index of closing prices of 30 industrial stocks, compiled by Dow-Jones News Service. The scales represent a change of 10 per cent in stocks prices by the same vertical distance as a change of 5 per cent in either the wheat price or the Moody index.

Prices tended to rise during September, to decline in October, and to rise again through November and December and the first third of January. They fell sharply on January 12, thereafter recovering part of the loss and fluctuating at a level near \$1.40 per bushel

for the remainder of the month. Measured in terms of the May future, the rise from early September to late January approximated 12 cents per bushel. Cash prices of most of the principal grades at their major markets rose more, by about 20 cents; an exception was the price of soft white wheat at Portland, which increased only about as much as the May future at Chicago. Prices of all of the principal types of cash wheat had moved above their respective loan levels by the end of December. The price of No. 2 Red Winter at St. Louis, the type relatively shortest in supply, ran above or only a cent or two below its loan level even in September and October.

The general strength of wheat prices is remarkable in view of the unprecedentedly large total supply. Relatively little of the supply pressed upon the markets, however, since the CCC stood ready to advance loans to producers at 85 per cent of parity and producers themselves seem to have been inclined to restrain their marketings of unpledged wheat. CCC loans on wheat were reported larger during July-December this year than last (385 as against 348 million bushels), a slightly larger fraction of the crop. Much of the unpledged wheat seems to have been held in anticipation of higher prices.

Incentives for farmers to restrain their sales, and for traders also to anticipate rising prices, lay in expectations both of continuing pressure toward general price inflation, and of governmental moves toward higher wheat prices. Prices rose in September largely on interpretations of the intent of the Congress to insert in anti-inflation legislation, demanded by the President on September 7, provisions that would reaffirm old-fashioned parity price, or this plus labor costs, as the governmental goal in wheat-price policy—perhaps about \$1.65 per bushel. The decline of prices in October was largely in response to evidence afforded in OPA's flour-ceiling order of October 5 that the goal might instead, and in spite of the price-control act approved three days before, be old-fashioned parity minus conservation and parity payments—perhaps about \$1.25 per bushel. Confidence that the Congress would eventually win the struggle seems to have afforded the principal basis for

the subsequent advance, though in December especially a rather sharp upturn in general wholesale prices may have contributed appreciably (see Chart 3). The advance of wheat prices was stopped when, on January 12, ceiling prices were unexpectedly imposed on corn by the OPA—an indication that the lower-price policies of the administration might prevail with reference to wheat.

Millers faced on the one hand with ceiling prices on flour, and on the other with rising wheat prices during November–December, were naturally squeezed—some doubtless more than others—especially as wheat prices rose rather steeply in December and early January, before the ceiling prices on flour were raised on January 4–5. The new ceiling, together with the slight decline in wheat prices on January 12 and their subsequent stability, appears to have afforded relief. Despite periods of squeeze, flour output remained heavy in December.

The struggle between the “administrative parity” price and the old-fashioned or an elevated parity was not concluded during the period under review. The OPA flour-price ceilings are reckoned with reference to administrative parity. The CCC sells its holdings at old-fashioned parity. Discussion in the Congress runs strongly in terms of old-fashioned parity revised to include labor costs. All three are too high in view of the level of wheat supplies at home and in other exporting countries.¹

CANADA

Despite a downward revision of 22 million bushels in the official estimate of the new Canadian wheat crop, Canada's wheat position for 1942–43 is currently appraised about as it was last September. The crop, now placed at 593 million bushels, still ranks as the largest ever reported; the average yield per acre stands the highest on record; and total supplies of wheat available from crop and inward carryover exceed a billion bushels for

the first time in history. The feed grains, as well as wheat, made record harvests in 1942, and the feed-grain supply per animal unit is unprecedentedly large.

Marketings and visible supply.—During August, wheat deliveries in Western Canada were extremely small—scarcely more than a tenth of the light deliveries in the same month of 1941. Indeed, weekly marketings did not begin to approach a normal rate until early October. The harvest was delayed by heavy rains in August–September and by labor shortage incident to the war: these factors and also the low quota limits on wheat deliveries were responsible for the light early marketings. Even after the rate of wheat marketings became more normal, it remained low not only in relation to the huge farm supplies available, but also relative to the small authorized crop-year delivery allowance of 280 million bushels. Fifty per cent of the authorized total deliveries were not made until January 1, whereas in former years the 50 per cent point of crop-year deliveries had usually been reached by mid-October and at the latest by mid-November.

The system of delivery quotas operated this year as a strong check to the movement of wheat from farms to market. On August 1 the basic delivery quota for wheat was set at 5 bushels per “authorized” acre, and in spite of subsequent increases to 8, 10, and even 12 and 14 bushels at certain points, the basic quota remained unchanged until December 9, when it was raised to 8 bushels. Last year all quota restrictions had been removed by mid-December, and in 1940 the basic quota had been raised from 8 to 12 bushels on December 13. The more severe marketing restrictions imposed on wheat farmers this year were relaxed by the Canadian Wheat Board (CWB) with respect to (1) wheat ground for use by producers and (2) three special categories of wheat. Farmers were authorized to have ground for their own use up to 40 bushels of wheat which would not be counted against the farmer's quota until the latter exceeded 12 bushels per authorized acre. Moreover, shipping priority was given to damp wheat, and farmers with delivery quotas of less than 14 bushels were authorized to deliver damp

¹ Substantially this view is expressed also by T. W. Schultz, *Farm Prices for Food Production*, in a forthcoming pamphlet in the series, *Wartime Farm and Food Policy*, published by Iowa State Agricultural College.

wheat under permit until the wheat deliveries in their delivery books totaled 14 bushels per authorized acre. Similar special quota-delivery provisions were announced for durum wheat and for Alberta winter wheat, thus relatively speeding the marketing of those specific types.

Oats and barley were favored with higher delivery quotas than wheat, and were also granted rail-shipping priority to encourage their movement to American lake ports before the close of navigation on the Great Lakes. By the end of December oats and barley deliveries combined totaled 88 million bushels—over twice as much as in the same months of 1941, three times as much as in 1940, and considerably the largest figure in at least a decade.

These sizable marketings went partly to export to the United States and partly to storage in visible positions in Canada. Shipments of barley and oats to the United States were the heaviest in years, reflecting the unusual demand for feedstuffs in this country. Some 54 million bushels of oats and barley were reported in the visible supply in Canada as of February 4, 1943—35 million bushels more than had been in store a year earlier. This largely accounted for the superficially surprising fact that the Canadian wheat visible stood 22 million bushels lower in early February this year than last, despite the great increase in the total available supply of wheat.

In neither of the past two years has there been any appreciable amount of unused storage capacity in Canada. At the beginning of February 1943 the total licensed grain-storage space probably barely exceeded 600 million bushels—roughly the capacity reported as of December 1, 1941 and again as of July 31, 1942.¹ In early February this year about 500 million bushels of all kinds of grain were reported in visible positions, as compared with 466 million last year. The residual space, recently amounting to roughly 100 million bushels, was probably mostly unusable because of requirements for working space, specialized binning of certain grain, etc.

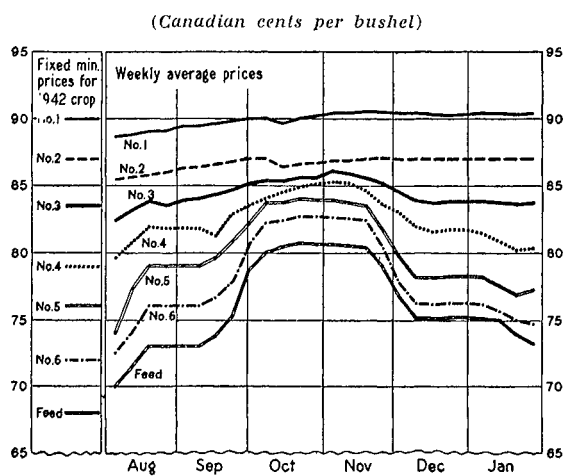
¹ *Monthly Review of the Wheat Situation*, Oct. 23, 1942, p. 20. Figures are not yet available for December 1942.

The quality of the new Western Canadian wheat crop is believed to be notably low with respect to both grading and protein content. However, this cannot be demonstrated statistically by the inspected marketings of August–December, since these included much 1941 wheat. More significant is the forecast of gradings for the 1942 crop published in October by the Grain Research Laboratory of the Board of Grain Commissioners: that only some 10 per cent of the crop might grade No. 1 Northern, 35 per cent No. 2, 25 per cent No. 3, and 30 per cent other grades. This suggests that the 1942 crop may contain the smallest proportion of No. 1 wheat of any crop since 1928 and the second smallest proportion of the three top grades during the past decade. Protein content, estimated at 12.8 per cent, is the lowest reported since 1928.

Prices.—Fixed minimum prices for the various grades of Western wheat were established by the CWB in August–September 1942, some six months after official announcement that the guaranteed minimum price for No. 1 Northern would be raised from 70 cents for the 1941 crop to 90 cents for the 1942 crop. As implied by the earlier announcement, the general level of prices in the current season has been the highest since 1937–38.

Chart 4 shows the Board's fixed minimum prices for carlots of wheat grading Nos. 1–6

CHART 4.—FIXED MINIMUM PRICES OF 7 GRADES OF CANADIAN WHEAT, AND WEEKLY AVERAGE CASH PRICES AT WINNIPEG, FROM AUGUST 1942*



* Data from *Canadian Grain Statistics and Monthly Review of the Wheat Situation*, September 1942, p. 4.

and Feed, basis Fort William or Vancouver, together with the actual course of prices of these grades of wheat on the Winnipeg market since last August. The striking feature of the chart is the strength shown by the lower grades, particularly during October–November. This reflected not real scarcity of those grades, but shortage at terminal markets relative to the substantial existing demand for wheat for feeding. The early severe restrictions on wheat marketings and shipments by rail sharply limited the flow of the lower grades of wheat to market; but the movement expanded in November–December with relaxation of those restrictions. The result was a more or less uniform decline in the prices of the lower grades after mid-November. But even in early February, Feed wheat was selling about 5 cents above its legal minimum price, and No. 6 Northern was 3 cents above its minimum. In contrast, No. 1 Northern has been selling during the past five months within a fraction of a cent of the legal 90-cent basis—until October slightly under 90 cents, more recently, slightly over.

To compensate for the higher official prices set for Western wheat for the current crop year and to preserve existing ceiling prices on flour and wheat used for feed, drawbacks have been allowed since August 1, 1942 on purchases of Western wheat for feed or for grinding for human consumption within Canada. The drawback on wheat used for feed was tentatively set by the Wartime Prices and Trade Board at 8 cents per bushel. The same board tentatively accepted 77 $\frac{3}{8}$ cents as the price of No. 1 Northern, Fort William, that was appropriate to the previously established flour ceilings. The difference between this price and the actual average price of No. 1 Northern wheat has been determined at the end of each month as the basis of the drawback allowed millers on their flour deliveries during that month. Thus, on flour deliveries for domestic consumption made in August 1942 against contracts negotiated after August 1, millers were allowed drawbacks on purchased wheat equal to the monthly average wheat price for August, 89 cents, minus 77 $\frac{3}{8}$ cents, or 11 $\frac{5}{8}$ cents per bushel of wheat, figured on a conversion basis of 4 $\frac{1}{2}$ bushels

per barrel of flour. Similarly calculated, the drawback allowed millers on deliveries in subsequent months rose to 12 $\frac{1}{4}$ cents in September, 12 $\frac{5}{8}$ cents in October, and 13 $\frac{1}{8}$ cents in November and December. No drawback is allowed on wheat ground for export.

On the Winnipeg futures market, the prices of the nearer futures have fluctuated close to the 90-cent minimum level. The October future remained constantly at that level until it went off the board. The December opened in September at 91 cents, dropped to 90 $\frac{1}{2}$ cents in October, declined further during the course of November, and sold on the cash-basis level of 90 cents in the delivery month. The May future, which has recently sold at about 92 $\frac{1}{2}$ cents, may be expected to show a similarly declining course over the following weeks. For these price developments the unchanging minimum cash price of the CWB was largely responsible. This differed from the system of farm-storage allowances that had provided the basis for gradually rising cash prices and appreciable positive spreads between futures in the two preceding years. Of little significance for futures-price relationships this year was the reduction in storage rates on wheat held in terminal elevators at Fort William–Port Arthur from 1/45 to 1/50 cent per bushel per day, effective September 5.

Transactions on the Winnipeg futures market continued light in volume. There was no incentive to speculation, and the business effected was mainly of a routine nature. Effective November 6, 1942 new futures-trading regulations came into force that reduced the types of operations that might legally be transacted on the Winnipeg exchange. Thereafter, sales of futures were limited to hedges, spreading trades in the same grain between different delivery months in the Winnipeg market, sales of futures previously purchased, and sales against purchases made during the same trading session. The new regulations were said to be designed “to facilitate the operations of the dominion government” and “to promote and protect all interests concerned in the purchase, sale, and handling of grain.”

Disposition of supplies.—Very little is known to us about the rate of consumption of

wheat within Canada over the past five months. Flour production through November was relatively heavy, but no heavier than normal domestic consumption, a good British demand for flour, and the flour-stocks position as of August 1, 1942 would seem to warrant.¹ Whether the per capita consumption of flour within Canada is being appreciably stimulated by shortage of other foods remains an open question, but the net effect of any such increase upon the huge supplies of Canadian wheat would be insignificant.

In contrast to the situation in the United States, there has been little progress in Canada in the direction of expansion of sales of the new types of vitamin-rich bread. The most recent reports indicate that less than 5 per cent of all flour sales represent "Canada Approved" flour. Since July 1, 1942 such flour has been required for the army, but the government has taken no other active steps to promote the manufacture or use of this flour.

The quantity of wheat used for feed in Canada varies sharply from year to year. In 1941-42 wheat feeding was heavy, partly in compensation for inadequate supplies of feed grains: in addition to 59 million bushels of wheat reported fed on farms, some 10 million bushels of Western wheat were shipped for feed to the Eastern provinces and British Columbia under the government's Freight Assistance Policy. This year, feed-grain supplies are the largest on record and well distributed throughout Canada. Moreover, pasture conditions were good in the late summer and early fall of 1942. These factors have presumably operated against heavy wheat feeding in the current season, but they may have been about offset by the larger quantities of wheat that have to be held back on Western farms during 1942-43 and by the profitability of feeding wheat in the Eastern provinces under continuation of the Freight Assistance Policy and the new drawback allowed against

purchases of wheat for feed. That Eastern feeding of wheat is continuing on a substantial scale this year is suggested by the fact that reported total rail shipments of wheat eastward from Fort William-Port Arthur amounted to 8.5 million bushels in August-January 1942-43 as compared with only 4.2 million in the same months of the preceding year. Although these figures include wheat for flour milling as well as feed wheat and although they are not strictly comparable because the Freight Assistance Policy did not go into effect until October 20, 1941, it is nevertheless reasonable to guess that feeding of Western wheat in the eastern provinces of Canada will be somewhat heavier this year than last.

Canadian exports of wheat and flour have not been reported since last June. However, it seems clear that the exports of August-December 1942 must have been less than the 86 million bushels reported for the same months of the preceding year, if only because Britain needs less foreign wheat in the present season (p. 137). On the other hand, Canadian wheat and flour clearances may not have run as low this year as in 1940, when Canada shipped a notably small proportion of her crop-year exports in the first five months. Canadian exports in August-December 1942 perhaps totaled 65-75 million bushels, well within the range of exports of 55-86 million bushels in corresponding periods of the two preceding years.

We infer that the reduction in Canadian exports from August-December 1941 represented a decline in shipments of wheat grain, rather than flour, and applied mainly to shipments to the United Kingdom. Exports to other countries, which had been small in August-December 1941, have probably been about as small this year. Over the past few months sales of Canadian wheat have been reported to Eire, Portugal, Switzerland, and Mexico, but in total these seem likely to have fallen substantially short of 5 million bushels. Exports to Greece, the Soviet Union, the Middle East, and Canada's usual customers in the Western Hemisphere have bulked larger, both absolutely and in relation to last year's shipments.

¹ Some millers, unable to obtain adequate supplies of good millable wheat through ordinary marketing channels, were relieved in November by a new provision that such wheat could be exchanged for stocks of milling quality held by the CWB in local country elevators. Exchanges were made on a bushel-for-bushel basis, with appropriate cash settlements for differences in grade.

For a while in December, Mexico was reported to be negotiating for 2-3 million bushels of Canadian wheat. But later reports suggest that Canada will supply Mexico with only about a million bushels: 250,000-500,000 bushels directly from Canada, and 500,000 bushels or more from stocks of Canadian wheat that have been held in store in Texas for over a year. The direct movement from Canada by rail to Mexico through the United States would presumably have been larger than is now anticipated if the Interstate Commerce Commission had not filed an order on January 13, 1943 forbidding all-rail shipments of grain from one foreign country to another through the United States except under special permit. This embargo was attributed to the great need for economy in the use of American transport facilities under existing war conditions.

As planned in the early summer of 1942, Canada has shipped 500,000 bushels of wheat to Greece every month since August as a gift of the Dominion government. These shipments have been made and distributed under the auspices of the Greek War Relief Association and the Swedish and International Red Cross.

Much less is known to us about Canadian wheat shipments to Soviet Russia and the Middle East. On September 8, 1942, a three-year credit of \$10,000,000 was reported extended to the USSR for the purchase of Canadian wheat. This credit, which would cover sales of something like 9 million bushels, was made retroactive to include some purchases effected through the British Ministry of Food in 1941-42. To what extent the credit has been drawn on for shipments since last August is not clear, but we assume that an appreciable quantity of Canadian wheat (mostly flour) has been exported to the USSR during the past five months. Shipments to the Middle East were perhaps equally significant or more so.

Prospects for carryover and 1943 crop.—The Dominion Department of Agriculture anticipates Canadian wheat exports of 205 million bushels in 1942-43.¹ If exports approxi-

mate this figure and wheat utilization within Canada is a little smaller this year than last (to allow for reduced use of wheat for seed as indicated in Table IV), the carryover next August 1 would be in the neighborhood of 675 million bushels. Such a carryover would provide for Canada's domestic needs and wartime exports of about 200 million bushels for almost two years without the harvesting of another crop.

The outlook for huge year-end stocks in August 1943 influenced the Canadian government to plan for substantially reduced sowings of wheat for 1943. The announced acreage goals provide for a decline of almost 4 million acres sown to wheat and roughly compensating increases in the acreage under oats, barley, flaxseed, and grass. To encourage farmers to reduce their wheat sowings even more sharply than this, the government recently announced that in 1943-44 wheat deliveries will be limited to 14 bushels per authorized acre, with 1943 and earlier wheats eligible for delivery. As a further incentive, a special payment of \$2 per acre will be made for all land under wheat in 1940 that is not seeded to wheat for 1943.

ARGENTINA

The August-December exports of Argentine wheat probably reached 30-32 million bushels, of which more than a third was wheat of the 1940 crop. In comparison with past years, the total was somewhat on the low side, though materially larger than that for the corresponding period of 1932, 1937, or 1938 in the preceding decade.

Information on the destination of Argentine wheat shipments through November indicates that over 60 per cent went to Brazil and other countries in the Americas, Brazil alone taking some 45 per cent. The remaining shipments included exports to the United Kingdom (over 10 per cent) and to Spain and other neutrals in Continental Europe (over 25 per cent). British takings, in particular, were sharply reduced as compared with earlier years: indeed, they were not even half as large as the small British takings in the corresponding period of 1941. This decline may have reflected in part Britain's reduced reliance on foreign wheat

¹ *Winnipeg Free Press*, Jan. 26, 1943, p. 8.

in the current season (p. 137), but more certainly it reflected the British policy of drawing wheat mainly from Canada and using the bulk of the tonnage allotted to the Argentine trade for increased shipments of Argentine meat.

For the second successive year, Brazil ranked far ahead of the United Kingdom and all other countries as the chief importer of Argentine wheat. Spain ranked second—a position never held before. Reported shipments to Spain during July–November 1942 were somewhat larger than in the corresponding period of any other war year. These sizable shipments were made possible by the negotiation of a new commercial agreement between Spain and Argentina, concluded on September 5, 1942. The agreement called for delivery to Spain before March 5, 1944 of one million tons (36.7 million bushels) of Argentine wheat, including the quantities shipped in anticipation of the signing of the agreement. The wheat shipments were scheduled to take place at a minimum rate of 4.5 million bushels quarterly. Provisions were also made in the agreement for deliveries of Argentine tobacco, and for compensating deliveries by Spain to Argentina of two merchant ships, a warship, shipping space for Argentine imports of petroleum, and specified quantities of iron and steel.

Reported shipments of Argentine wheat to other European neutrals were extremely small. About a million bushels went to Sweden, and less than half a million to the remaining countries combined. Earlier efforts by Turkey to arrange for the importation of several million bushels of Argentine wheat apparently came to naught because of the shortage of shipping.

Prices.—The Argentine Grain Regulating Board (GRB) made only minor changes in its announced export prices for wheat during July–December. Wheat of the 1940 crop continued to be offered to Europe—Brazil at 1.00–1.20 pesos per quintal lower than the corresponding prices for 1941 wheat, and an additional premium of .40 pesos was charged on all 1941 wheat sold to South American countries other than Brazil. The announced changes in export prices for Europe–Brazil up to the end of December are shown below in pesos per quintal ex-dock.

Date	Bulk wheat ^a		Bagged wheat ^b	
	1940 crop	1941 crop	1940 crop	1941 crop
Late July.....	7.00	8.10	8.00	9.10
September 22.....	6.90	8.10	7.90	9.10
About October 20..	7.00	8.10	8.00	9.10
About December 20	7.10	8.10	8.10	9.10

^a Since late July, prices for bulk grain have included a deposit for the use of bags for delivery; a corresponding refund is granted on return of the bags.

^b Permits to export bagged grain have been granted since July 4, 1942 only when loading conditions have required.

Domestic millers continued to pay 9.00 pesos per quintal (roughly 73 cents, U.S., per bushel) for wheat purchased from the GRB, the sole selling agency. Up to November 30, at least 70 per cent of the wheat purchased by millers had to be wheat of the 1940 crop; but after that date they were permitted to use as large a proportion of 1941 wheat as they wished. New price regulations for the 1942–43 crop year in Argentina provided that (1) millers should continue to buy all their wheat from the GRB at 9.00 pesos per quintal for domestic use and (2) they should not grind any wheat of the 1942 crop.

The GRB bought 1941 wheat from producers at the basic price of 6.75 pesos per quintal (about 55 cents, U.S., per bushel) until late in November, when the guaranteed price for that crop was canceled, on the ground that producers had already had ample time to complete delivery. For wheat of the 1942 harvest, producers were promised on December 2 the same basic price as had been in force for the preceding crop. Moreover, as in the preceding year, farmers who sell their new-crop wheat to the GRB must agree to reduce their wheat plantings by up to 10 per cent, if so requested. The GRB retains for 1942–43 the exclusive right to sell wheat for domestic milling and for export.

New crop and total supplies.—The area sown to wheat in Argentina for the 1942 harvest was roughly 9 per cent smaller than that sown in the preceding year, though the GRB had not required any reduction. Persistent dry weather through July discouraged sowings and caused poor germination in the drier regions. Later weather conditions were favorable in eastern Argentina, but not in the south-

west, where drought caused heavy damage. In late November and early December, Argentine observers were anticipating variable but high yields per acre in Santa Fé, Entre Ríos, and the eastern portions of Córdoba and Buenos Aires, with notably low yields in San Luis, the Pampa, and the western sections of Buenos Aires and Córdoba. Early commercial forecasts of the new crop were mostly in the neighborhood of 200 million bushels. There was some surprise, therefore, when the first official estimate indicated a crop of 243 million bushels; and this was lowered only insignificantly to 235 million bushels in the second official estimate. The latest estimate implies an average national yield of 14.3 bushels per acre sown—a yield well above average, though materially lower than had been secured in several earlier years.

Whether the new Argentine wheat crop amounts, in fact, to somewhat more or less than 235 million bushels is of little importance as regards Argentina's general wheat position. With a carryover of old-crop wheat that probably approximated 160 million bushels on January 1, 1943, Argentina must have had available for her new crop year a total wheat supply of almost 400 million bushels, implying an exportable surplus of about 300 million. Only her former peak supplies in 1938-39 and 1928-29 had been at all comparable in size, and in those earlier years, the foreign markets open to Argentine wheat had been much larger. This year Argentina cannot expect to dispose of more than about 80 million bushels through exportation, whereas in 1939 she exported 180 million and in 1929 some 250 million. There is every reason to expect, therefore, that Argentine wheat stocks will be of record size on August 1, 1943 (Table IV) and also at the end of the Southern Hemisphere crop year in December 1943.

Since Argentine supplies of corn and linseed are also extraordinarily heavy this year, and imports of bags and bag materials from India have been sharply reduced by the war, officials have been forced to take special steps to deal with the critical problem of grain storage.¹ Of the total grain-elevator and warehouse space, estimated at only 422 million bushels, not more than 10.6 per cent is suitable for

bulk storage. The remainder, fitted only to receive bagged grain, was mostly filled before the new wheat and linseed crops were harvested. Even worse, only about half the bags needed for shipment and storage of the new crops were available. To meet this situation, the government took over the existing supply of grain bags and attempted to distribute them as equitably as possible among the various producers. Small-scale farmers were allotted proportionally more bags for their grain than large-scale farmers, on the theory that the latter were in a better position to provide their own grain-storage facilities. Meanwhile, the government has encouraged experimental construction of underground granaries, lined with cement, at various interior points and some ports, and has urged a shift to the *estiba-silo* system of storage (arrangement of a circular wall of bagged grain within which bulk grain can be stored) on farms and at railroad centers where extra storage space is needed. For more adequate and permanent farm storage, the Ministry of Agriculture has recommended the construction of inexpensive surface silos, for which long-term loans will be made at low rates by the Banco de la Nación. Large-scale farmers have been notified that this year they must expect to supply the storage facilities required for at least half of their grain.

AUSTRALIA

Sown to the smallest planted acreage in 20 years (Table II), Australia's 1942 wheat crop nevertheless proved to be only a little below average size. In Western Australia growers had been ordered to cut their sowings for 1942 to two-thirds of their officially determined "normal" areas; but elsewhere farmers had been left free to plant up to "normal" levels. To compensate for the special planting restrictions imposed on Western Australia (attributed to the greater surplus in that state and the more difficult transport problems involved in marketing such wheat) growers there were promised an extra payment of 1s. a bushel (based on the zone-aver-

¹ The following discussion of this problem is based mainly on material drawn from *Foreign Crops and Markets*, October 1942, p. 239; *London Grain, Seed and Oil Reporter*, Oct. 20, 1942, p. 410, and *Monthly Review of the Wheat Situation*, Nov. 27, 1942, p. 8.

age yield) with respect to the ordered reduction. Under this program, the sown-wheat acreage in Western Australia was apparently reduced almost a million acres from the preceding year. And roughly another million was voluntarily cut from the planted-wheat acreage of the other states—a reflection of labor shortage, reduced supplies of phosphate fertilizers, and government urgings (with appropriate price incentive) to expand the output of meat, dairy products, and vegetables at the expense of wheat.

A reduction of this magnitude in wheat plantings would normally have resulted in a relatively small crop, but this year weather conditions were so unusually favorable that the yield per acre of wheat, about 15 bushels, was one of the highest ever recorded. Of the total crop, now estimated at about 148 million bushels, something like 130 million is expected to be delivered to the Australian Wheat Board.

Deliveries of this size cannot be made rapidly under current conditions of labor shortage, heavy wartime railroad traffic, scarcity of petrol, and congested silos. Australian farmers have accordingly been advised to provide bags and adequate farm-storage protection for at least part of their new wheat. Moreover, the Liquid Fuel Control Board, which has been urging the necessity of installation of producer-gas units on farm trucks, has ruled that extra petrol for the haulage of wheat to market will be available only to farmers who have outfitted their trucks with such units or can show contracts stating that installation will be completed within 28 days.

For the new Australian wheat crop, the basis of payment will differ materially from that in force for the preceding crop. Last year, growers were guaranteed eventual payment of 3s. 10d. (about 62 cents, U.S.) a bushel for bagged wheat f.o.b. ports, for a "marketed crop" of 140 million bushels or less. No payment was guaranteed for wheat marketed in excess of 140 million bushels, whether grown on licensed or unlicensed acreage; but in the summer of 1942 the new Labor Government decided that 2s. should be paid for "illegitimate" excess wheat. This presumably implied a higher rate of payment on

the larger "legitimate" excess of 1941 wheat.

Near the end of August, a different payment basis was announced for 1942 wheat, applicable to all the wheat produced on licensed acreage. The revised plan provides that each farmer is to receive at the time of delivery 4s. (about 65 cents) a bushel, bagged basis, net at country sidings for the first 3,000 bushels he markets. For all additional deliveries he will be paid a first *advance* of 2s. a bushel and such subsequent payments as this wheat earns under pooled management. The 4s. price, bagged basis (3s. 10d. bulk), is expected to apply to about 70 per cent of the marketed crop of 1942, or to some 91 million bushels. The new price system means an increased average gross return per bushel of wheat to farmers¹ and a correspondingly heavier loss to the Commonwealth treasury; but since costs of wheat production have risen (including the higher wages farmers have been ordered to pay this year to harvest hands) the *net* return to wheat growers may have increased relatively little, if at all.

The total amount of wheat now on hand in Australia is presumably the largest on record as of February 1. The carryover of old-crop wheat on November 30, 1942, here estimated at about 120 million bushels, had been exceeded only by the huge old-crop stocks accumulated at the end of the last war, and that excess was more than offset by the increased wheat production of 1942. More recently, the crop year 1939-40 was characterized by exceedingly heavy wheat supplies in Australia, but the aggregate supplies of the current year are apparently some 60 million bushels larger.

These unprecedentedly large supplies are being drawn down very slowly through exportation and domestic use. Since the outbreak of war in the Pacific, Australian wheat shipments have been far below normal, averaging perhaps below rather than above 3 million bushels a month. Domestic consumption has

¹ Payments made through November 1942 on pooled wheat of the past four crops have been as follows, bagged basis, for delivery at ports: 1938 (Pool 1), 2s. 9.9d.; 1939 (Pool 2), 3s. 7.9d.; 1940 (Pool 4), 3s. 11.25d.; 1941 (Pool 5), 3s. (first payment). For Pool 5 the *guaranteed* price is 3s. 10d., and more may be paid. With average freight costs added to the net country price of 4s. for 1942 wheat, the average port-basis would be at least 4s. 4.5d. for the first 3,000 bushels.

expanded only slightly, including the flour used for American and other Allied troops located in Australia, the moderate amount of wheat diverted to feed at a reduced official price, and the quantity (roughly 5 million bushels) expected to be used in 1943 for the production of alcohol. No important new information on the use of wheat for feed or alcohol has become available since last September;¹ but recent reports indicate that wheat has successfully passed the first tests as a fuel for producer-gas units for trucks and automobiles.

BRITISH ISLES

Both the United Kingdom and Eire harvested huge wheat crops in 1942. The total outturn seems likely to have been in the neighborhood of 125 million bushels, the largest harvest in more than 75 years. Both countries had extended the area sown to wheat for 1942, and the British crop was favored by exceptionally good growing weather. In the United Kingdom, harvests of most other grains, potatoes, and root crops were also unusually bountiful; but in Eire, the potato crop, sown on a reduced acreage, was 20 per cent smaller than in 1941, and substantial declines were probably recorded also for sugar beets and the major fodder roots. Despite the relatively greater increase in the 1942 agricultural output of the United Kingdom, however, the country remained dependent on foreign sources for about a third of her food consumption, whereas Eire was virtually self-sufficient.

To reduce Britain's demand for overseas food requiring valuable cargo space, the Ministry of Food has recently taken several steps to divert increased amounts of home-grown grains and other produce from feed and industrial channels to human consumption. Most important of these was the announcement in November that in the near future the Ministry

would order an admixture of not over 5 per cent of oat and barley flour with National Wheatmeal for bread making.² In addition, existing regulations provide that (1) all potentially millable wheat must be used for flour and meal for human consumption; (2) the Ministry of Food shall have prior rights to purchase (mainly to build stocks for admixture purposes) virtually all potentially millable oats and barley not required for seed, milling for human consumption, or certain other restricted uses; and (3) no cereals shall be made available this year to distillers of whisky except in fulfillment of the low quotas specified for 1942.³

Also in line with Britain's official policy to save shipping, the Ministry of Food continued its earlier publicity campaign to induce consumers to eat more home-grown potatoes and less bread. This campaign was strengthened by officially established price increases for bread and flour and a price reduction for potatoes. Effective September 20, the standard retail price of the four-pound loaf was raised from 8*d.* to 9*d.* and the price of National Flour was advanced from 33*s.* 3*d.* per sack to 38*s.* 3*d.*; a week later the price of potatoes was reduced to the low level of 1*d.* per pound. How far these new measures will curtail bread consumption remains to be seen.

Early evidence suggests that the darker bread required in Britain since last spring has almost certainly been associated with some slight decline in bread consumption. No change has been ordered in the minimum legal extraction rate for domestic flour, set at 85 per cent in March 1942; but the maximum proportion of white flour legally permitted to be mixed with National Wheatmeal for baking purposes was reduced from 25 per cent to 12½ per cent effective July 14, 1942.⁴ By the end of September all old stocks of domestic white flour were reported to have been exhausted; but some white flour from Canada was still being distributed for mixing.

In Eire, the legal extraction rate for flour has been maintained at 100 per cent during the current crop year, as compared with 95 per cent in August–December 1941. Bread remained unrationed through January, and no plans for the admixture of other cereals in

¹ For such details as were then released, see *WHEAT STUDIES*, September 1942, XIX, 15.

² *Corn Trade News*, Nov. 25, 1942, p. 479.

³ *London Grain, Seed and Oil Reporter*, Dec. 3, 1942, pp. 573, 574; *ibid.*, Sept. 18, 1942, p. 291; *ibid.*, Dec. 18, 1942, p. 634; *ibid.*, Jan. 19, 20, 1943, pp. 60, 64; and *Foreign Commerce Weekly*, Oct. 10, 1942, p. 21.

⁴ *London Grain, Seed and Oil Reporter*, July 13, 1942, p. 45.

wheat flour have been made public. Effective September 14, 1942, the official price of flour was raised from 52s. 6d. per sack to 60s., and a week later the price of bread was advanced from 1s. to 1s. 1d. per four-pound loaf. These price changes seem to have been made to compensate for the increased price of wheat announced by the government for 1942-43.

Both the United Kingdom and Eire have continued this year to subsidize the production of bread and flour. In June 1942 the British subsidy was reduced to 7s. 9d. per sack for all flour used in bread production plus a temporary allowance of 2s. per sack on the first eight sacks produced. The additional temporary payment of 2s. was extended month by month to the middle of November, pending a report on bakers' costs; but it was finally withdrawn in December, retroactive to November 14. At the time this subsidy was discontinued, the Ministry of Food reported that the total cost of subsidizing flour, bread, oatmeal, and feedstuffs had declined from an annual rate of £50,000,000 in September 1941 to £40,000,000 in July 1942. Eire's bread and flour subsidy has been maintained this year at the same level as in 1941-42, with the total cost estimated at almost £2,000,000.

In reflection of the large new wheat crops harvested by the United Kingdom and Eire, and of the wheat-saving measures adopted by those countries during the past year, the flow of foreign wheat to the British Isles was probably considerably smaller in August-December 1942 than in the corresponding period of the preceding year. Eire's wheat imports, already low in the fall of 1941, may not have been reduced further; but the United Kingdom almost certainly took substantially less foreign wheat this year. Reported Argentine shipments to the United Kingdom totaled only about 3 million bushels in July-November 1942 as against 7 million in the same months of 1941; and we infer that this substantial reduction was not offset by any enlargement in Canadian exports (p. 132). In both periods the quantity of wheat exported from the United States to Britain was negligible, and shipments from Australia were far below normal. Eire's grain imports were predominantly if not wholly from North America.

Not content with the progress already made in the expansion of domestic wheat production and the curtailment of foreign imports, officials in both the United Kingdom and Eire set still higher goals for wheat plantings for next year's harvest. In Britain, the Minister of Agriculture announced a new wheat-price program for 1943-44,¹ which gives greater incentive than the price program of the current year to all producers growing wheat on land previously cultivated, and to producers likely to get low yields of wheat from newly-plowed land. Early last autumn British officials thought that the new price program together with continuing measures might result in the expansion of winter-wheat sowings by some 600,000 acres, but hopes of such a large increase vanished when plantings were seriously delayed by persistently unfavorable weather in October. On light soils not suited to wheat, British farmers were urged to plant rye, with the promise of an acreage payment of £3 per acre (the same as for wheat) and a standard price of 14s. per cwt. as compared with 14s. 6d. for wheat.

CONTINENTAL EUROPE

Official estimates of wheat crops in European countries are scantier this year than last, and unofficial quantitative appraisals also are rare. The usual estimate of world wheat supplies and requirements issued in October by the International Institute of Agriculture has not yet reached us. Comments in the daily European press and elsewhere, however, make it possible to attempt a quantitative appraisal of the total Continental crop and of its regional distribution less rough than that given in our September Survey.

Recent information confirms our previous view that the Continental wheat crop of 1942 was poor and somewhat smaller than the preceding one. We now appraise it at about 1,300 million bushels, compared with 1,360 million in 1941, and 1,225 million in 1940. Allowing for outturn in the British Isles, these figures are broadly consistent with the United States Department of Agriculture's appraisal of total

¹ For details see WHEAT STUDIES, September 1942, XIX, 16.

European crops of 1,380 million bushels in 1942, 1,420 million in 1941, and 1,300 million in 1940,¹ but our totals are higher for 1942 and 1941 (Table I).

However, wheat will be scarcer in Continental Europe during 1942-43 than figures of production indicate, since the year-end carryovers of wheat from 1941-42 were smaller than in the previous year. We can only guess how far stocks have been reduced. The reduction was probably not large during 1941-42, as every possible measure was taken to keep stocks from falling too low; and in some countries, particularly Germany, they must still be above minimum levels.² The wheat situation on the Continent this year appears still tighter if compared with 1940-41, even though the 1942 crop seems to be better than that of 1940. Very large stocks of wheat were carried on the Continent after the first year of war.

It was in central Europe and the lower Danube that 1942 wheat crops were most affected by unfavorable weather developments during the winter and spring of 1941-42, and these were below 1941 crops considerably more than was true for the Continent as a whole. The decline, perhaps 100 million bushels, was equally divided between the two regions. The decline in these two areas under Nazi control was compensated for to a certain extent by some improvement of the crops in the western region of the Continent and in areas northeast of Germany. Wheat crops were somewhat larger in 1942, partly because crop areas were increased slightly and yields per acre were better, in Nazi-controlled France, Belgium, and the Netherlands, and also in neutral Spain and Portugal. The small Swiss crop also increased in 1942, and perhaps also the Norwegian. The Italian crop is also reported to have been somewhat better

than in 1941, though still slightly below the average for the five prewar years.

In the northeast the wheat crop was better in 1942 than in 1941 in neutral Sweden and German-occupied Poland, and perhaps also in the occupied Baltic states. The Swedish wheat crop, while below average, was about 35 per cent larger than the very poor crop of 1941. Concerning Poland, a British source says that the grain crop was the best since the beginning of the war.³ But all these increases were relatively small, and could hardly compensate for half of the reduction of output in central Europe and the lower Danube. The 1942 wheat crop in the neutral countries, though small, was perhaps some 10 per cent better than in 1941.

The regional distribution of the small Continental wheat crop is particularly disadvantageous to Germany, not only because her own crop is very small, but also because crops are small in all countries except Poland that must be regarded as natural sources of her imports. It must be said, however, that in some prewar years when supplies in the Danube countries were as small as this year, they were still capable of exporting as much as 20 million bushels of wheat or more.

Several other factors may alleviate the shortage of wheat in central Europe this year. The rye crop, so important for breadmaking in this area, suffered less than wheat from unfavorable weather during the winter and spring of 1941-42. According to the United States Department of Agriculture, the 1942 rye crop in central Europe was of about the same size as in 1941, though somewhat below the prewar five-year average. In this respect Denmark is a striking example, for, while very little wheat was harvested in 1942 because of winterkilling, the rye crop was larger than in 1941 on about the same area.⁴ A less striking but similar development occurred in Sweden.

Crops of spring grains, particularly barley, which is now used to a considerable extent in breadmaking, were substantially better than those of winter grain. Their acreages were extended considerably, partly because they were used to reseed the damaged winter-grain acreage. In the lower Danube, acreage under corn, which is used extensively for human food, was

¹ *Wheat Situation*, November-December 1942, p. 9.

² For changes in stocks during recent years, see M. K. Bennett, Helen C. Farnsworth, and Rosamond H. Peirce, "Wheat in the Third War Year: Major Developments, 1941-42," *WHEAT STUDIES*, December 1942, XIX, 97, 117.

³ *Corn Trade News*, Oct. 21, 1942, p. 430, reporting a summary of crops by the British Ministry of Economic Warfare.

⁴ *Monthly Crop Report and Agricultural Statistics*, September 1942, No. 9, p. 301S.

also expanded. The crop suffered somewhat from drought, yet an average yield was expected.¹ Potato acreage was substantially expanded in Germany and in other countries of the Continent including the Danube, and conditions of crops were mostly reported as good. Thus, harvests of crops that are used either in breadmaking or as substitutes for bread were better than those of wheat, and total supplies of wheat substitutes in 1942 may be larger this year than last, and perhaps above average.

Apparently Nazi-controlled Europe could expect very little augmentation of bread-grain supply through inshipments from the portion of the USSR invaded in 1941. Even according to German sources, not more than 70-75 per cent of the normal grain area was seeded in the Ukraine, deep behind the front line. In areas nearer to the front the percentage must have been much lower. Rumanian officials claimed, however, somewhat better restoration of crops in the extreme southwestern region, neighboring on Bessarabia, which is under their administration (the so-called Transnistria).² Most of this, however, was sown in the spring under the pressure of time, since spring came unusually late in 1942 and the supply of tractors, horses, and machinery was acknowledged to be scarce. The winter grains, which yield more than the spring grains, were sown on a small acreage and were greatly damaged by the severe winter. But the summer weather was generally favorable for the development of grain crops in Ukraine, and these crops were reported as relatively good, considering the unfavorable work conditions.³ Even so, the 1942 crop in Ukraine must have been small because of the small acreage sown. It could hardly be adequate to cover even the most pressing requirements of the local population, since grain surpluses were not very large in Ukraine under normal conditions in recent prewar years. Since last September, however, the European press and

radio have been spreading the news that trainloads of food were arriving in Germany from Ukraine.⁴ The German press explains that the shipment of some grain from Ukraine was possible because the German army, which had been supplied from local Ukrainian sources during the winter and spring, had moved farther east in the summer and had thus released certain grain supplies for shipment home. This information is substantiated to a certain degree by an official statement in this country that the Germans took a million tons of grain from Ukraine in 1942.⁵

If this estimate is correct, we are inclined to think that only a small portion of these shipments was taken from Ukraine occupied in 1941. The larger portion was presumably taken from the 1942 crop in the newly-invaded area of the Don and western portions of North Caucasia, where normal or larger than normal acreages were reported sown to grain before the invasion and the crops were reported as good. The rapid occupation of some portions of these rich agricultural regions may have permitted the Germans to take considerable quantities of grain despite scorched-earth tactics. This conclusion tends to be confirmed by specific mention of large shipments of oilseed, mainly sunflower seed from the western area of the North Caucasus.

Short supplies of bread grain during the current crop year resulted in two developments in governmental policies, both aiming at more complete and equitable utilization of existing supplies for the use of populations not engaged in agricultural production: (1) controls were tightened on the obligatory deliveries by farmers of grain above the quotas reserved for their domestic consumption, and (2) fixed prices for wheat and other grains were raised for the 1942 crop above the levels prevailing earlier in most of the countries of the Continent.

Controls.—The tightening of crop controls was particularly striking in the countries of southeastern Europe, normally a grain-surplus area. Government policies in these countries have usually been directed toward facilitating the disposal of surpluses rather than toward establishing controls of them. Consequently, the administrative organs were not

¹ *Economist*, Sept. 26, 1942, p. 390.

² *Südost-Echo*, Aug. 7, 1942.

³ *Frankfurter Zeitung*, Oct. 23, 1942.

⁴ *New York Times*, Oct. 4, 1942; *Neue Zürcher Zeitung*, Sept. 15, 1942; *Frankfurter Zeitung*, Oct. 23, 1942.

⁵ Advance release by the Office of War Information of Milo Perkins' statement on Jan. 1, 1943.

well prepared for the new task, which was especially difficult here because rural population predominates heavily in the area and prices are greatly inflated.

The quotas of bread grain reserved for domestic consumption of agricultural producers were reduced for the 1942 crop in most of countries of this area. In Bulgaria the quota was reduced from 900 grams per day per member of the family to 400, in Croatia from 250 grams to 200.¹ In Hungary it was also somewhat reduced and was specified in greater detail: 240 kilograms of bread grain per year are assigned for each grown male of the producer's family (between the ages of 16 and 60 years), 120 kilograms for each child below the age of 5 years, and 180 kilograms each for all other members of the family.²

In other countries of this area certain percentages of the bread-grain crop, rather than all surpluses above the quotas reserved for domestic consumption, must be delivered to the government agencies. These percentages increase progressively with the size of the grain production of farms. Such a system is followed in Turkey and Greece, and to a certain extent in Croatia.

In order to prevent farmers from withholding bread-grain supplies, with motives of increasing their own consumption and selling on the "black market" at prices higher than the fixed prices, strict controls of threshing and milling in local country mills have been established in southeastern Europe. The crop controls in Bulgaria and Hungary are the most detailed and effective,³ since administration there is not greatly disorganized by the war; but controls established by the German occupation powers in Serbia and Poland must be even more strict. The newly-formed governments of Slovakia and Croatia are try-

ing hard to organize their crop control efficiently. In Poland the death penalty is threatened for malicious nonfulfillment of obligatory deliveries of agricultural products or for concealing them from government agencies. Special courts are established for trial of persons guilty of such actions of "sabotage," and their decisions are executed immediately.⁴

Prices.—Most Continental governments, however, found it advisable not to rely exclusively upon the enforcement of these controls; by raising fixed prices, they created an additional stimulus for producers to deliver their grain surpluses. Only a few countries—Bulgaria, Hungary, Denmark, Belgium, the Netherlands, and Spain—left fixed prices for wheat of the 1942 crop at the level of the preceding year. However, except for the Netherlands, all these countries had raised their wheat prices by 50 to 80 per cent during the first three years of the war. In the Netherlands alone were fixed prices of wheat from the 1942 crop less than 20 per cent above the pre-war level.⁵

Even Germany, which has made a principle of price stabilization, found it necessary to introduce a premium for early delivery of bread grain (before September 30). This raised the price for wheat delivered early by 5 per cent or more above the level at which it had stood during the previous three years. Moderate increases of wheat prices—not exceeding 10 per cent—were authorized also in Portugal, Norway, Sweden, and Switzerland. Some of these countries increased basic prices (Norway and Switzerland); others, leaving basic prices unchanged, introduced premiums or price supplements (Portugal and Sweden). It must be added that some countries of this group, such as Sweden, had raised their wheat prices a great deal during the three preceding years.

All other countries of Continental Europe have raised their fixed prices for 1942 wheat a great deal more. Several did so by granting producers large premiums for early deliveries even though basic prices remained without change. In this way Italy has raised wheat prices. In the southern area prices for wheat delivered before July 10 were raised by more than 40 per cent, and for that delivered before

¹ *Neue Zürcher Zeitung*, Sept. 22, 1942.

² *Pester-Lloyd*, June 14, 1942.

³ *Pester-Lloyd*, June 14, 16, and 19, 1942 and *Bulletin de la Direction pour l'Achat et l'Exportation des Céréales*, June 19 and July 5, 1942 show how far the government controls go in these countries.

⁴ *Südost-Echo*, Aug. 14, 1942.

⁵ Information on fixed prices of grain for the 1942 crop in the countries of Continental Europe is summarized in *Monthly Crop Report and Agricultural Statistics*, September 1942, No. 9, pp. 318-30S. See also Table VI, p. 150.

September 30 by more than 30 per cent. In northern Italy these premiums were somewhat smaller, and prices were raised by about 28 and 17 per cent respectively. Premiums for early delivery (September 30) of bread grain in Slovakia and Croatia raised fixed prices there by more than a third above the level of last year. France also raised fixed prices for the 1942 crop by more than a third, partly by raising the basic price and partly by granting premiums to producers for early deliveries and early threshing.

Fixed prices of wheat and other cereals were raised most in Greece and Rumania. In Greece this reflects mainly the extreme shortage of all kinds of bread grain; but in Rumania, where fixed prices of wheat and corn were doubled in 1942, it was due rather to general price inflation than to real grain shortage. In spite of small Rumanian crops in 1942, the combined supplies of wheat, corn, and other cereals now used in breadmaking unquestionably exceed domestic food requirements, at present levels of rations.

Crop planning.—The objective of these governmental price policies is not only to bring to market existing supplies of bread grain, but also to stimulate further expansion of production. In order to achieve the second objective, various governments undertook additional measures. In several countries direct planning and controls of agricultural production by government agencies have advanced further during recent months.

Thus in Italy a general plan for total agricultural production is being introduced for the first time for the 1942-43 crop. Regional quotas for 33 principal food crops are prepared by the Ministry of Agriculture, and local authorities have to enforce the plans. For nonvital crops, special licenses permitting their production are required. Extraordinary measures of enforcement, including forced management and requisition of properties, are considered.¹ Special measures are also being taken for plowing up pastures and other land on the hills, earlier protected as forest; and the government finances 33 to 38 per cent of the cost. It has been estimated that up to a million acres of such land may be placed under crops in Italy.² The Netherlands and

Switzerland also plan to expand their grain areas further in 1943.³

In Bohemia-Moravia, Hungary, and Rumania, various measures directed toward expansion of the grain areas were taken. Additional cultivation is sometimes encouraged by special premiums or bonuses granted to producers; or compulsory cultivation of an acreage assigned for specific crops is enforced; or co-operative use of machinery and a kind of collective farming may be introduced. Usually two or all of these methods are combined.⁴

Bread rations.—In spite of the short wheat crop, bread rations in Continental Europe have not been reduced below their preharvest levels. On the contrary, in some countries the drastic reductions in bread rations that were put into effect during the spring and early summer of 1942, in anticipation of a very poor crop, particularly in the Danubian countries,⁵ were restored fully or in part. But in some cases rations were restored at the cost of a further deterioration of bread, and in others restoration was only temporary. Thus, though in September Germany restored her bread ration to its pre-April level, the bread now includes not only wheat and rye, but also 20 per cent of barley; and the bread-grain quotas allowed to be retained by producers have not been restored. In August Hungary increased the daily ration of bread for normal consumers from 150 to 200 grams, the level of the previous May, but on November 30 she was obliged to reduce it again to 160 grams. Slovakia increased her bread ration somewhat from September 1, but not to the level that was in effect at the beginning of the year. Spain has apparently raised her bread ration from September last,⁶ and from September 2

¹ *Der Bund*, Sept. 16, 1942.

² *Neue Zürcher Zeitung*, Aug. 9 and 12, 1942; *Der Bund*, Aug. 13, 1942; *Pester-Lloyd*, Aug. 27, 1942.

³ *Neue Zürcher Zeitung*, July 24 and Aug. 24, 1942; *Pester-Lloyd*, Aug. 27, 1942.

⁴ See *Neue Zürcher Zeitung*, Sept. 6, 1942; *Südost-Echo*, Aug. 28, 1942; *Pester-Lloyd*, Aug. 26 and Sept. 17, 1942; *Economist*, Dec. 12, 1942, pp. 734-35.

⁵ For changes in the bread rations from December 1941 to July 1942, see *WHEAT STUDIES*, December 1942, XIX, 99.

⁶ *Pester-Lloyd*, Sept. 1, 1942.

Sweden increased the share of wheat in the bread (or flour) ration from three-eighths to one-half.¹

But Italy, Bulgaria, Croatia, and Rumania, in all of which bread rations were considerably reduced last spring, had no chance to restore them even partially, as far as we know. Finally, Switzerland had to introduce rationing of bread last October at the level of current average per capita consumption (225 grams daily for normal consumers) in order to check further increase of consumption.² On balance, then, even assuming that bread rations will not be reduced during the remaining part of the crop year, rations on the continent of Europe will average somewhat lower during 1942-43 than they were in 1941-42.

In several countries of the Continent, notably Belgium, Norway, Finland, and Greece, present domestic supplies of bread grain are not adequate to assure the maintenance of present rations. Relief shipments of food to Greece, as pointed out in our September Survey, have somewhat improved her bread rations, and if continued will prevent starvation there. The other three countries, however, must depend completely on Germany for their deficit in bread-grain supplies, and Germany is in a less favorable position to supply them than she was last year. In October negotiations were carried on between Germany and Finland regarding the food supply for 1942-43, and it was reported that Germany guaranteed to Finland food supplies better than last year. On the basis of this promise, the Finnish bread ration was somewhat raised in November.³ According to the Swedish press, Norway depends on deliveries from Germany for at least half her bread-grain requirements, on the basis of the present ration. The most convenient source from which Germany may supply bread grain to these two countries is Poland, which harvested a good crop this year. As to Belgian requirements, Germany may have them met by France.

But France, in spite of a crop slightly better than in 1941, may not be in as favorable a

position to supply Belgium this year because of the occupation of North Africa by the United Nations. France may have succeeded, however, in obtaining a substantial portion of her usual imports of wheat from North Africa before the occupation, since her needs were particularly pressing before the harvest and North African wheat is usually exported early in the season. But the occupation of North Africa must unfavorably affect the future crops of the Continent, since it was one of the principal sources of phosphates—the fertilizer most deficient in Europe during the last two years—not only for France, but for Italy and Germany as well. Now the phosphates may go to Great Britain, though a large fraction was mined in Tunisia and exported through Tunisian ports.⁴

The maintenance of bread rations in the neutral countries during the current year also depends on foreign shipments of bread grain, which are permitted (but controlled) under British navicerts. Imports from Argentina and Canada may be large enough to permit the neutral countries to maintain bread rations during the current crop year at present levels.

SOVIET RUSSIA

The highly successful winter offensive begun in November by the Soviet army will have two effects upon the food situation of Soviet Russia. In the short run—during the current crop year—it will make the food situation much more difficult, since the receding invaders leave evacuated territory denuded of food, while the population to be fed is considerably augmented. In the long run—for the next crop year and those following—it may enlarge the food basis of Russia, since the regained territories are normally surplus food areas.

The long-run effect depends, however, on the further development of military action, which is hardly predictable at present. Although the Axis powers had lost by mid-February practically all their territorial gains of last summer and it now appears that they may fall back far behind the winter line of 1941, they may undertake a new offensive in the spring or summer. Their stake in Russia

¹ *Foreign Commerce Weekly*, Nov. 21, 1942, p. 24.

² *Neue Zürcher Zeitung*, Oct. 9, 1942.

³ *New York Times*, Oct. 22, 1942, p. 8.

⁴ *Foreign Commerce Weekly*, Dec. 5, 1942, pp. 12, 13.

is too large to be abandoned without a desperate effort to hold or even enlarge it. For future German defense strategy, the natural resources of the Ukraine and the Caucasus are of crucial importance; and, in order to have them, they may be obliged to undertake a new offensive and to seek a definite decision with the Russian army. Hence, the area of the Don and the North Caucasus may remain a battlefield rather than an agricultural area.

On the other hand, the possibility is not excluded that the German army may completely lose initiative on the eastern front and be obliged to accept purely defensive tactics on a line far behind the present front. An early opening by the Allies of a second front in Europe would make this alternative the more probable. The Russians would then hold the regained territories without much immediate contest and would be in a better position to restore agriculture in the rich surplus areas of the southeast, particularly in the North Caucasus. The restoration of agriculture is in no way easy, however, for that area has been devastated twice, first by the "scorched-earth" tactics of the Russians and second by the retreating enemy.

Even if the Axis forces should be placed on the defensive, it can hardly be expected that crops will be restored during the next crop year even to an approximately normal level. The degree of restoration will depend primarily on how many tractors, combines, and other agricultural machines and how many operators the Russians can supply for these vast areas. The factories in Stalingrad and Rostov, the most important machine-building centers of this region, must be completely ruined, and they cannot be expected to furnish new tractors and agricultural machinery for the next crop year. Only if the Russians can bring machinery and operators from the more northern and eastern areas will it be possible for them to seed a large acreage to spring wheat and other spring crops in the regained territory. Furthermore, the western portion of the North Caucasus is mainly a winter-wheat area and the central agricultural region (around Kursk, Orel, and even Voronezh) is mainly a winter-rye area. The next crop must therefore depend to a considerable extent

upon how much wheat and rye was sown there last fall under the German control. These sowings were presumably far below normal, since the Germans must have experienced a shortage of oil and tractors, extremely important for agriculture in this area; and they could hardly have organized farming effectively during the short period of their occupation.

The effect of the highly successful winter offensive upon the future food supplies of Russia may have, of course, wider than local territorial effects. If Russia continues to control Caucasian sources of petroleum and if the Volga route is open for navigation, as seems most probable now, petroleum for the important agricultural regions on the Volga and in Siberia will be assured, and production there may be somewhat enlarged.

For the next few months of the current crop year, however, the larger the territory regained, the greater will be the food difficulties experienced by Soviet Russia, because it will be necessary to feed the population of liberated areas. Under such circumstances, it is advisable to make more precise the situation as it was before the offensive (last November 1). In our September survey we emphasized the great importance of the agricultural surplus areas on the Don and in the North Caucasus for Russian food supplies. Without question the loss of these regions, even temporarily, made the Russian food position much more precarious than it had been before. But it did not make the situation desperate, particularly in regard to bread grain and other cereals, which supply about three-quarters of the calories in the Russian diet.

We estimate that the territory invaded by the Germans as of November 1, 1942 contained over 60 million people, or about 36 or 37 per cent of the total population of Soviet Russia according to the census of 1939; and, on the basis of official crop statistics for previous years, that this area included about the same percentage of her total grain acreage in 1942, as well as of her bread-grain acreage. Since a considerable number of people were evacuated east—we guess no less than 5 million—the loss in population amounted to about one-third of the national total. At the

average geographical distribution of yields per acre, the losses of the grain crop, on the other hand, must be appraised at about 40 per cent of the total crop, since grain yields per acre in the territory invaded by the Germans normally tended to be somewhat above the average for the USSR as a whole. Hence, an average grain crop within the territory under Soviet control before the November offensive would produce about 90 per cent of the normal per capita grain supplies of the same territory. Since there have been no comments in the press to the effect that this year's grain crop was below average, and some indications that it was better than average, we may conclude that the Soviet Russian bread supply behind the November 1 front line should not be far below normal during the current crop year. This is the more likely to be true if indications are to be credited that the grain stocks under the control of the government were sizable or even large at the beginning of the current crop year.

Of course, temporary local shortages of grain could easily occur in the grain-deficit regions of uninvaded Soviet Russia because of transport difficulties. Normal sources of the grain supply for some deficit areas were lost to the enemy, and it was necessary to supply these areas from less convenient sources. This relates particularly to the Transcaucasian region, which was normally supplied from North Caucasia and which during the current winter must be supplied from the distant Siberian or Volga regions, unless the Russian army succeeded in moving grain from the North Caucasus at the time of the retreat late last summer. Similar difficulties may also be experienced in supplying the large deficit areas of the central industrial and northern regions of European Russia with bread grain from the east instead of from the south. Presumably wheat shipped to Russia from Canada is going to these northern areas as well as to the Far East. During recent years the latter area was normally supplied with wheat from North America. The only news concerning wheat shipments to Russia from Canada is contained in the announcement on September 8 of the opening of a Canadian credit covering prospective

shipments of about 9 million bushels of wheat. If this means that Canadian shipments have not yet exceeded this quantity, it may indicate that Russian needs in wheat are not extremely pressing. But these needs may become much greater, at least temporarily, since the number of people to be fed during the current crop year in the territory regained since November is considerable. It would have exceeded 10 million persons at the winter front line of 1941, and will be still larger if the front line moves farther west than that of 1941.

The danger to the bread-grain situation in Soviet Russia for the next crop year lies also in the great uncertainty of grain crops in the eastern regions. Crop failures caused by drought are frequent and sometimes devastating in the spring-wheat area of the Volga and Siberia, especially in Kazakstan in the southern portion of Siberia. However, to our knowledge, no unfavorable comments on last autumn's moisture supply in these regions have been revealed, and it may be assumed that there is not now an immediate threat to the next grain crop.

The somewhat uncomfortable situation of the bread-grain supply in the territory controlled by Soviet Russia must also be interpreted in the light of the unsatisfactory supplies of some other important foods. Supplies of domestic sugar now amount to only about 10-15 per cent of normal prewar production. More than half of the total number of pigs and of some important vegetable oils were lost. Consequently supplies of domestic fats and oils, as well as of meat, must be much shorter than usual. We assume that these kinds of food are now shipped to Russia from this country,¹ but their distribution throughout the enormous space of the country, particularly among the civilian population so far as they reach civilians at all, must be uneven and slow. Consequently, the population must now rely on bread to an even greater extent than it did

¹ Secretary Wickard stated before the House Foreign Affairs Committee on February 4, 1943 that the total lend-lease shipments of foodstuffs to Russia up to January 1, 1943 were composed about two-fifths of meat, fats and oils, and dairy products and about one-sixth of sugar. Shipments of butter alone amounted to about 17,000,000 pounds.

before the war, and this may result in a much greater shortage of bread grain than would develop under normal conditions with the present supplies.

The increasing acuteness of the food situation in Soviet Russia during recent months is indicated by the fact that food shipments to the USSR from this country are now much larger than those shipped in the earlier months of the current crop year and that purchases of wheat and flour for lend-lease shipments during 1943 seem likely to increase greatly.¹ Secretary of Agriculture Wickard stated recently that the Russians are giving food the top priority now and that for the first time lend-lease shipments of food to Russia in December were larger than the combined shipments to the United Kingdom and other British destinations.²

OTHER COUNTRIES

Little is definitely known about the 1942 wheat crops and recent wheat-trade positions of the remaining countries of the world. Yet it is reasonably clear that the urban populations of most of those countries are facing various degrees of bread-grain deficiency that will not be fully offset by importation.

Special attention has recently been focused on the food situation in French North Africa, normally a net-food-exporting region. This year the wheat and total grain crops were apparently below average and smaller than in 1941. Moreover, substantial quantities of grain and other foods had been shipped thence to France before the arrival of American troops early in November. Although the remaining food stocks were presumably ample, both peasants and merchants generally reacted to the American invasion by hoarding supplies more tightly than before and by de-

manding higher prices for the food they displayed. This sufficed to put a real strain on the food positions of some of the leading cities, where the margin between minimum food requirements and offered supplies had become increasingly narrow over the past two years as stocks of cloth and other imported wares that the peasants wanted in exchange for their produce had steadily dwindled. To relieve the new strain on the cities and to discourage further hoarding, Britain and the United States promptly shipped food (including some flour) to North Africa to be sold in the urban centers. Later shipments seem to have consisted mainly of tea, sugar, canned milk, and cloth—products which the local inhabitants are quite willing to accept in exchange for their labor or for their stored grain, oil, and dried fruit.

In Egypt, the wheat harvest of 1942 was appreciably larger than that of the preceding year and somewhat above average. On the other hand, the general food situation remains moderately tight, partly as a result of persistent hoarding. For this reason, and to keep imports as low as possible while building up food reserves, Egyptian officials have apparently continued in force the stringent milling regulations introduced in 1941-42: a minimum legal extraction rate for wheat of 90 per cent and the specification that 25 per cent rice flour and 25 per cent corn flour shall be mixed in all bread flour.

In contrast to French North Africa and Egypt, the major Middle Eastern countries this year face unusually severe shortages of wheat and other foods. Turkey and Iran, in particular, need substantial imports to supplement deficient crops and to offset extensive hoarding. Syria and Lebanon, Palestine, and Iraq appear to have harvested crops less short than those of 1941, but hoarding and political unrest continue to exert an adverse influence on food conditions in those countries. To encourage grain farmers to market through accepted channels this year, virtually all the Middle Eastern countries sharply raised their official grain prices and attempted to make existing marketing regulations more effective. In most of the countries governmental controls over grain marketings were extended;

¹ The *Southwestern Miller*, Feb. 2, 1943, p. 23, mentions estimates of probable purchases of flour for lend-lease shipments in the year starting March 1, 1943, as high as 13-15 million barrels. Total purchases of grain and grain products by the Food Distribution Administration in December amounted to \$7,000,000.

² *New York Times*, Jan. 28, 1943, p. 27. The report of Lend-Lease Administrator Stettinius also reveals greatly increased shipments of food during recent months. See *New York Times*, Jan. 26, 1943, p. 6; *San Francisco Chronicle*, Feb. 5, 1943, p. 12.

but Turkey abolished her government grain monopoly of the preceding season in favor of specified legal delivery quotas. Turkish farmers are free this year to market their surplus wheat as they please, after they have delivered to the government 25 to 50 per cent of their production (the percentage depending on the crop acreage).

To relieve the serious grain shortages faced by Turkey and Iran, the United States and Britain have agreed to make available to those countries certain quantities of wheat and barley. The terms of the transactions already effected are not known to us. Apparently, the United States agreed to provide Turkey with 3.7 or 7.3 million bushels of wheat, if that country can supply the needed shipping. Final arrangements seem to have been made before December for the shipment of at least 1.8 million bushels of the total. Iran reportedly received a first shipment of 180,000 bushels of wheat and barley from British stocks in the Middle East in December, and thereafter was scheduled to receive 180,000 bushels of wheat each month from the United States. In total, the Middle Eastern countries seem likely to import in 1942-43 as much as 15-20 million bushels of wheat—roughly the same as last year, when Turkey took less and the other countries more than is to be expected this season.

India, a net exporter of wheat in all but two of the past ten years, now seems likely to be a small net importer in 1942-43. To meet the serious food shortages that have developed in some of the coastal cities (partly as the result of hoarding) small shipments of Australian wheat were sent to India in August-December. Moreover, in January British officials reportedly agreed to supply shipping for an addi-

tional 3.7 million bushels of Australian wheat. This may, as the officials hope, encourage native owners of grain to market some of their holdings. If not, other shipments will probably be arranged if war conditions permit.

Virtually all other major Far East markets are closed to wheat imports this year except in so far as the Japanese government sees fit to move wheat from certain parts of the area under its domination to other parts. On this trade it would be useless to speculate. Almost certainly, however, the flow of wheat to China from outside areas has been negligible and will continue small, despite widespread reports of famine conditions in the northern provinces of Honan and Shensi.

In the Americas, the total flow of wheat from surplus to deficit countries promises to be about the same this year as it was in 1941-42. Mexico and Brazil will probably take a little more wheat in the current season, but the aggregate imports of the other countries may be almost correspondingly reduced in reflection of enlarged domestic crops and increased shipping stringency. Mexico imported only small quantities of wheat during August-December, but in December-January she signed contracts for imports of more than six million bushels—five million bushels of United States wheat and one million of Canadian. Prospects for heavier Brazilian takings emerged in October, when the Brazilian government abolished existing requirements for the admixture of 10 per cent manioc flour with all wheat flour. By treaty with Argentina, Brazil had agreed to remove this admixture requirement on January 1, 1944; its earlier removal mainly reflected the great improvement that has taken place over the past two years in Brazil's general trade position.

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APPENDIX TABLES

TABLE I.—WHEAT PRODUCTION IN PRINCIPAL PRODUCING AREAS EX-RUSSIA, 1937-42*

(Million bushels)

Year	World ex-Russia ^a	Four chief exporters					British Isles	Continental Europe ex-Russia				French North Africa ^d	India	Others ex-Russia ^e
		Total	United States	Canada	Australia	Argentina		Total	Four neutrals ^b	Others ex-Danube	Lower Danube ^c			
1937.....	3,810	1,451	876	180	187	208	63	1,473	156	955	362	72	364	387
1938.....	4,574	1,826	932	360	155	379	81	1,778	149	1,163	466	72	402	415
1939.....	4,205	1,613	751	521	210	131	72	1,621	162	1,008	451	100	372	427
1940.....	3,917	1,734	812	540	83	299	75	1,225	111	819	295	62	401	419
1941 ^e	3,935	1,649	943	315	167	224	90	1,360	138	882	340	80	383	373
1942 ^e	4,175	1,957	981	593	148	235	125	1,300	150	860	290	65	376	352

* Largely official data, for boundaries as in 1939; figures in italics represent or include in substantial part unofficial approximations.

^a Excludes USSR, China, Iran, Iraq, Transjordan, and various small producers, but includes Brazil and Peru.

^b Spain, Portugal, Switzerland, Sweden.

^c Hungary, Yugoslavia, Rumania, Bulgaria.

^d French Morocco, Algeria, Tunis.

^e As of Feb. 1, 1943. For details of estimates not here shown by individual countries for 1941 and earlier, see WHEAT STUDIES, December 1942, XIX, 108.

TABLE II.—WHEAT ACREAGE IN AUSTRALIA AND ARGENTINA, 1937-42*

(Thousand acres)

Year	Australia						Argentina		
	Total	New South Wales	Victoria	South Australia	Western Australia	Others	Planted	Harvested	Abandoned
1937.....	13,735	4,465	2,686	3,162	3,026	396	20,717	17,244	3,473
1938.....	14,346	4,651	2,748	3,080	3,413	454	21,302	20,137	1,165
1939.....	13,284	4,381	2,827	2,735	2,970	371	17,833	12,763	5,070
1940.....	12,454	4,289	2,673	2,559	2,620	313	17,507	15,472	2,035
1941 (licensed).....	12,817	4,285	2,877	2,497	2,687	471	.....	.....	.....
1941 (planted).....	12,060	3,969	2,757	2,325	2,650	359	18,038	14,254	3,784
1942 (licensed).....	10,951	3,667	2,614	2,415	1,818	437	.....	.....	.....
1942 (planted)*.....	.....	3,250	.....	2,000	1,760	...	16,432	.....	.....

* Data from *Monthly Summary of the Wheat Situation in Australia*, and publications of the U.S. Department of Agriculture. (Dots (...)) indicate that data are not available.

^a Preliminary data from trade sources for Australia, fourth official estimate for Argentina.

TABLE III.—UNITED STATES FLOUR PRODUCTION, EXPORTS, AND RETENTION, 1942-43, WITH COMPARISONS*

(Thousand barrels)

Period	Production: reporting mills			Estimated production ^a			Net exports ^b			Estimated net retention ^a		
	1940-41	1941-42	1942-43	1940-41	1941-42	1942-43	1940-41	1941-42	1942-43	1940-41	1941-42	1942-43
July-June ...	105,331	104,826	.....	111,698	111,162	.....	7,036	6,125	.....	104,662	105,037	.....
July-Sept....	26,673	27,005	27,836	28,286	28,637	29,519	1,390	1,625	1,500	26,896	27,012	28,019
Oct.-Dec....	26,863	27,192	30,165	28,486	28,836	31,988	1,956	1,500	1,500	26,530	27,336	30,488
Jan.-Mar....	25,645	26,389	.....	27,195	27,984	.....	1,460	1,500	.....	25,735	26,484	.....
April-June ..	26,150	24,240	.....	27,731	25,705	.....	2,230	1,500	.....	25,501	24,205	.....

* Reported production and trade data from U.S. Department of Commerce.

^a Estimates of Holbrook Working.

^b Includes shipments to possessions. From July 1940 through September 1941, derived by subtracting imports for consumption instead of general imports minus re-exports.

Monthly data are unavailable from October 1941. The italicized figures represent our rough guesstimate of the monthly average.

TABLE IV.—WHEAT DISPOSITION ESTIMATES, ANNUALLY FROM 1938-39*

(Million bushels)

Year	Domestic supplies			Domestic utilization				Surplus over domestic use		
	Initial stocks ^a	New crop	Total	Milled (net)	Seed use	Balancing item	Total	Total	Net exports ^b	Year-end stocks ^a
A. UNITED STATES (JULY-JUNE)										
1938-39....	154	932	1,086	475	75	+174	724	362	109	253
1939-40....	253	751	1,004	472	73	+128	673	331	47	284
1940-41....	284	812	1,096	476	74	+126	676	420	34	386
1941-42....	386	943	1,329	480	64	+126	670	659	27 ^c	632
1942-43 ^d ...	632	981	1,613	495	63	+242	800	813	28	785
B. CANADA (AUGUST-JULY)										
1938-39....	25	360	385	47	35	+42	124	261	158	103
1939-40....	103	521	624	49	36	+47	132	492	192	300
1940-41....	300	540	840	43	30	+56	129	711	231	480
1941-42....	480	315	795	46	29	+71	146	649	225 ^c	424
1942-43 ^d ...	424	593	1,017	45	24	+68	137	880	205	675
C. AUSTRALIA (AUGUST-JULY)										
1938-39....	50	155	205	31	14	+14	59	146	96	50
1939-40....	50	210	260	33	13	- 2	44	216	86 ^c	130
1940-41....	130	83	213	32	13	+ 8	53	160	90 ^c	70
1941-42....	70	167	237	33	11	+13	57	180	35 ^c	145
1942-43 ^d ...	145	148	293	33	11	+14	58	235	35	200
D. ARGENTINA (AUGUST-JULY)										
1938-39....	72	379	451	74	21	+ 4	99	352	122	230
1939-40....	230	131	361	73	21	+13	107	254	179	75
1940-41....	75	299	374	73	22	+ 3	98	276	96	180
1941-42....	180	224	404	74	20	+ 7	101	303	83	220
1942-43 ^d ...	220	235	455	74	20	+11	105	350	75	275
E. FOUR CHIEF EXPORTERS										
1938-39....	301	1,826	2,127	627	145	+234	1,006	1,121	485	636
1939-40....	636	1,613	2,249	627	143	+186	956	1,293	504	789
1940-41....	789	1,734	2,523	624	139	+193	956	1,567	451	1,116
1941-42....	1,116	1,649	2,765	633	124	+217	974	1,791	370	1,421
1942-43 ^d ...	1,421	1,957	3,378	647	118	+335	1,100	2,278	343	1,935

* Based on official data so far as possible; see WHEAT STUDIES, December 1942, XIX, 118.

^a For United States and Canada, stocks in North America, instead of stocks within the country used hitherto.^b United States data adjusted for changes in stocks of United States wheat in Canada; Canadian include grain

clearances, as in WHEAT STUDIES, December 1941, XVIII, 185, Series B.

^c Our rough guesstimate. Canada, August-April = 169.^d Estimates as of Feb. 1, 1943.

TABLE V.—SELECTED WHEAT PRICES, WEEKLY FROM SEPTEMBER 1942*

(U.S. cents per bushel)

Week ending	United States							Canada (Winnipeg) ^a				Argentina, 78-kilo (fixed) ^{ab}	Australia, f.o.b. ports ^{ac}
	Futures (Chicago)		Cash					Futures		Cash			
	Dec. (July)	May	Basic cash (Chl.)	No. 2 H.W. (K. C.)	No. 2 R.W. (St. L.)	No. 1 Dk.N.S. (Mnpls.)	Soft White (Port.)	Dec.	May	Wtd. average	No. 3 Man.		
<i>1942</i>													
Sept. 5.....	123	127	122	116	133	115	113	..	..	79	76	55	70
12.....	126	129	126	120	132	119	116	..	..	79	76	55	70
19.....	127	130	127	120	..	120	115	..	..	79	77	55	70
26.....	128	131	129	123	..	122	116	..	..	79	77	55	70
Oct. 3.....	128	131	129	122	..	122	114	83	..	80	77	55	70
10.....	125	129	127	121	..	119	112	83	..	80	78	55	70
17.....	124	127	126	120	138	118	113	82	..	79	78	55	70
24.....	124	127	126	120	..	120	114	82	..	78	78	55	70
31.....	124	126	125	120	..	118	114	82	..	78	78	55	70
Nov. 7.....	126	128	126	122	..	120	114	82	..	78	78	55	70
14.....	126	128	126	123	132	119	114	82	..	78	78	55	70
21.....	125	128	126	123	..	120	114	82	..	78	78	55	70
28.....	125	129	127	124	..	120	..	82	..	77	78	55	70
Dec. 5.....	126	131	129	126	..	124	117	82	85	76	77	55	70
12.....	129	132	134	127	145	127	117	82	85	75	76	55	70
19.....	134	135	139	131	..	132	119	82	85	74	76	55	70
26.....	136 ^d	136	140	132	151	135	120	82	85	75	76	55	70
<i>1943</i>													
Jan. 2.....	137 ^d	137	142	134	..	136	122	..	85	75	76	55	70
9.....	140 ^d	140	144	137	151	139	124	..	85	76	76	55	70
16.....	139 ^d	139	144	136	..	138	124	..	84	75	76	55	..
23.....	139 ^d	139	144	137	156	140	125	..	84	74	76	55	..
30.....	140 ^d	140	145	137	..	140	125	..	84	76	76	55	..

* For sources and methods of computation, see WHEAT STUDIES, December 1942, XIX, 120.

^a Converted at constant official exchange rate, in U.S. cents per unit of foreign currency: Canada, 90.9090; Argentina, 29.773; Australia, 322.8.^b Grain Regulating Board buying price, Buenos Aires.^c Australian Wheat Board offering price to United Kingdom, bulk basis.^d July future.

TABLE VI.—PRICES OF DOMESTIC WHEAT IN EUROPE, AUGUST 1937-42*

(Indicated currency per quintal; except as noted for the U.K.)

August	United Kingdom (shillings per cwt.)		Sweden (kronor)	Germany (RM) ^a	France (francs) ^a	Italy (lire) ^a	Netherlands (florins) ^a	Belgium (francs)	Denmark (kroner)	Bulgaria (leva) ^a	Rumania (lei)	Hungary (pengő)	Yugoslavia (dinars)
	Standard	Gazette											
1937.....	10.0	9.4	18.8	19.9	180	125	10.22	141	17.3	320	474	20.5	173
1938.....	10.0	6.8	17.9	19.7	199	135	10.73	122	13.8	340	400	20.2	158
1939.....	11.0	4.3	16.7	19.6	198 ^b	135	10.90	125	14.8	350	420	19.7 ^a	148
1940.....	14.5	13.1	24.2	19.6	214 ^b	155	11.86	170 ^c	28.0 ^{ad}	430	687 ^a	25.5 ^a	313
1941.....	14.5	14.7	27.0 ^a	20.4	300 ^a	175 ^a	13.25 ^d	220 ^{ce}	28.0 ^a	620 ^c	1,100 ^a	30.0 ^{ae}	350 ^f
1942.....	16.0	15.8	27.0 ^a	21.4 ^e	404 ^e	205 ^e	13.25 ^d	220 ^{ce}	28.0 ^a	620	2,200 ^a	30.0 ^{ae}	500 ^f

* Data from official sources, the International Institute of Agriculture, and foreign news sources. An attempt has been made to include early delivery premiums applicable in August. Acreage payments, available in some countries, are not included except for Italy.

^a Fixed prices to producers; in Germany for the Berlin area.^b Less a tax of from 14 to 19 francs per quintal.^c Maximum price to producers.^d September.^e Including premium for early delivery applicable in August; for Italy in 1942 includes estimate of 10 lire per quintal from payment of 200 lire per hectare.^f Fixed prices for Serbia; in August 1942 includes 100 dinars premium for early delivery.

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