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BRITISH PREFERENCE FOR EMPIRE WHEAT

SINCE November 17, 1932, a duty of 2s. per quarter has been levied against British imports of wheat from non-Empire countries, while Empire wheat has been imported duty-free. Empire preference on flour began earlier, in March 1932. Both duties are low, as protective duties go.

Experience during the first season under Empire preference warrants the conclusion that preferential duties of such amount will by no means reserve the British markets for Empire wheats. The proportion of ex-Empire wheat entering into the annual supply of the United Kingdom will not be radically lowered. Except with the occurrence of extraordinary gluts of wheat in Australia and Canada, or of exceptional shortage in Argentina, Argentine wheat will tend to hold its position in the United Kingdom. When exportable wheats are freely available to the Soviet government, Russian wheat will enter duty-paid in substantial quantities. The incidental exports into the United Kingdom, such as white wheat from Baltic Germany and soft red wheat and flour from France, will hardly find the duty formidable. Probably the duty will keep out or greatly restrain imports of American wheat and flour other than that from the Pacific Northwest, supporting the relatively higher position of the Chicago future.

Canada has indeed been given a preference over the United States in respect of hard wheat and Australia has been given a preference over the United States in respect of soft wheat; but they have not been given effective preference over Argentina and Russia. If such preference is really to be claimed by the Dominions and granted by the United Kingdom, a much higher rate of duty will need to be established.

STANFORD UNIVERSITY, CALIFORNIA
October 1933

WHEAT STUDIES
OF THE
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BRITISH PREFERENCE FOR EMPIRE WHEAT

I. INTRODUCTION

Empire preference was extended to wheat and flour in 1932, when the United Kingdom established tariff duties on flour and wheat imported from foreign countries while permitting these products of countries within the British Commonwealth of Nations to enter duty-free.

Until their elimination following the Act of 1846, the British Corn Laws, from 1791, had included features of colonial preference, particularly for British North American colonies. The preference mainly took the form of admitting colonial grain and flour when prices stood at levels at which foreign grain and flour were excluded, or of having a scale of duties in

relation to prices that was discriminating in favor of colonial products. In 1843, however, the duty on Canadian wheat was reduced to a flat nominal figure of 1s. per quarter of eight bushels, while a substantially protective sliding-scale tariff applied to foreign wheats. Under the Act of 1846 repealing the Corn Laws the protective duties on wheat and flour were first reduced and then, as from February 1, 1849, eliminated; hence the colonial preference vanished.

A "registration duty" of 1s. a quarter on grain and 4½d. per hundredweight on flour remained in force until 1869. A revenue duty of about the same amount (3d. per cwt. on wheat and 5d. per cwt. on flour) was in force in 1902-03.¹ Both of these low duties applied alike to Empire and foreign products. Empire preference was not a feature of the control of wheat and flour importations by the Royal Commission on Wheat Supplies from 1916 to 1921.

The post-war decade saw a revival of British "protectionism," with elements of Empire

preference; but only with its radical extension in 1932 has the system been applied to wheat and flour. Under these recent measures, British Empire overseas countries enjoy much the same commercial status as Ireland had under the Corn Laws from 1806 to 1849, when Irish products were admitted free of duty while protective duties were levied upon products

of all other countries. In a historical comparison, however, it is to be kept in mind that a colony in the old days was a very different thing from a dominion today in the British Commonwealth of Nations.

The present duty on flour, 10 per cent ad valorem, was established by the Import Duties Act,

1932, effective March 1, 1932. This Act imposed a 10 per cent duty on all commodities imported from foreign countries that were not previously dutiable or not specifically exempt. Imports from the Dominions were exempted until November 15, 1932, pending the results of the Ottawa Conference; and the Ottawa Agreements Act, 1932, extended this exemption. This uniform rate of duty was intended only as an initial step. Under the Act an Import Duties Advisory Committee was set up to recommend, after investigation, new duties or modified rates of duty. This Committee has already made numerous recommendations which have been made effective; but it recently (July 1933) declined, after investigation, to propose a change in the flour duty.² The effective rate of duty on flour depends, of course, on the c.i.f. import price of flour; thus far it has been more than compensatory with the duty on wheat subsequently established.

Wheat was listed in Schedule I of the Import Duties Act among the commodities specifically exempted from the 10 per cent ad valorem duty. At the Ottawa Imperial Eco-

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¹ Finance Act, 1902, 2 Edw. VII, c. 7.

² See *Milling*, July 8, 1933, p. 35.

nomic Conference in August 1932, however, representatives of the British government agreed with representatives of the Dominion governments on a series of rates of duty to be applied to products imported from non-Empire countries. For wheat, a rate of 2s. per quarter of 480 pounds (8 bushels) was agreed upon. These agreements were ratified by the Ottawa Agreements Act, 1932, passed on November 15, and the duty on wheat came into force by Treasury order on November 17, 1932.

Meanwhile, a program had come into effect, under the Wheat Act of May 12, 1932, for giving substantial financial aid to growers of wheat in the United Kingdom itself. This program, which we have discussed in the July 1933 issue of *WHEAT STUDIES*, entailed no reliance upon import duties. The wheat duty (and in some degree the flour duty as well) is to be regarded not as a device to protect British wheat growers, but as a means of implementing a Dominion preference in which Canada and Australia are the two Dominions mainly concerned.

The initiative in obtaining the wheat-preference arrangement was taken by the Canadian Prime Minister, Mr. R. B. Bennett. In his opening address¹ at the Ottawa Conference on July 21, 1932, he asked for his country: "(1) the retention of existing preferences, and (2) their *effective* extension to those other natural and processed products of which the United Kingdom is an importer" and "which comprise the most important part of our exports" Under "other natural and processed products" wheat and wheat flour must have stood first. He adverted to proposals for preferential tariffs that he, on behalf of Canada, had urged at the Imperial Economic Conference in 1930, which had fallen through because the United Kingdom was not then ready to adopt a protective tariff. He insisted "that Canada must have greater export markets for its natural products," and he expressed the hope that from the Conference Canada would get "greater markets within the Empire," which he was

persuaded would "mean as well greater world markets." Clearly, Mr. Bennett expected the preference to yield real advantages to Canada, and to Canadian wheat interests in particular.

The precise nature and extent of the expected advantage to the wheat-surplus Dominions, however, has not been clearly set forth. Presumably two things were anticipated: first, that Dominion wheats would tend wholly or largely to displace non-Empire wheats in markets of the United Kingdom and in the British loaf; and second, that in consequence of enlarged outlets for Dominion wheats in the United Kingdom the total returns from wheat operations in the Dominions would be enhanced. How far such expectations were well founded, and how effective in these senses the scheme adopted will prove, is an important question to which we shall frequently advert.

Empire preference with import duties on foreign wheat and flour will provoke in the United Kingdom widespread discussion on "who pays the duty." Such a discussion of tariff incidence—long a favorite topic with British economists and traders—has indeed already begun. The few but tenacious Liberals who oppose the new system urge that a burden arises under the tariff; and that part of this burden will fall on the British consumer under all circumstances, and under certain conditions all of it. The Tory proponents of the plan deny this, for the most part; but where a consequential net increase in British wheat price must be conceded, as offset thereto they argue that there is increased demand for British products in Canada, Australia, and India.

The plan has not been in operation long enough to permit comprehensive discussion on the basis of experience, with the aid of comparisons of prices of Empire and non-Empire wheats in the United Kingdom, in other importing countries, and in the countries of origin. Nor do we propose here to enter into discussion of the theory of incidence of a tariff duty. Nevertheless, an early examination of the new policy, with specific reference to wheat, is justified by the importance of the topic. Although the British wheat and flour duties pale into insignificance when

¹ *Imperial Economic Conference at Ottawa, 1932: Appendices to the Summary of Proceedings . . .*, Cmd. 4175, pp. 66-72.

contrasted with the excessive tariffs, quotas, and milling regulations in Germany, France, and Italy, it is a striking fact that, after over eighty years of virtual free trade in staple foodstuffs, the United Kingdom has reimposed protective duties on these products and reapplied to them the principle of Empire preference. On the basis of past experience and present conditions it ought to be possible to indicate the probable influence of the new system upon the importation of wheat into the United Kingdom, together with the sequential adaptations. It is worth while to attempt a forecast of the secondary effects in other wheat net-importing countries of western Europe. The complementary side of the picture—the direct and indirect effects in the principal exporting countries of the world—is probably of more general interest than the primary effects in the United Kingdom.

Such a task has many ramifications. Commerce in wheat cannot be considered as a closed compartment of international trade. Empire preference opens up broad questions in which transfers of payment loom quite as large as transfers of commodities. Empire preference is a political system as well as an economic plan; it is a phase of economic nationalism. Such considerations increase the difficulty of analysis and forecast but afford a larger justification for examining the policy as applied to one great staple foodstuff.

At this stage in experience with the system it is convenient to examine the topic of Empire preference in wheat mainly in the fashion of a catechism, since a topical treatment is all that seems practicable. Analysis of the operation of the first season is also attempted. Though the abnormal circumstances in the world enforce caution in the interpretation of these early experiences, they may be accepted as normal in so far as they are in conformity with reasoning and with trade expectations.

THE DUTY BASIS

Three preliminary questions must first be considered: (1) Why did Empire preference on wheat take the form that it did? (2) How was the 2s. duty arrived at? (3) Why was it fixed so low?

Before and during the Ottawa Conference

another form of Empire preference was discussed with much interest and favor. This involved a system of import quotas, whereby rights to certain shares in British importations of a commodity for a given period were assigned to the exporting Dominions, with a view to assuring them a larger share than they could otherwise count on getting. This scheme had won support in Great Britain. It appealed to politicians, as compared with tariff duties, in part because it could not readily be attacked as involving a "tax on food." On December 11, 1931, months before the Conference met, the British government announced its adherence to the policy of an Empire wheat quota.¹ Eventually, the Ottawa agreements included various quota arrangements, notably for imports of animal products; and the quota device is now being extensively employed by Great Britain, both with other parts of the Empire and with foreign countries. For wheat, however, the quota plan was rejected in favor of a tariff duty on foreign wheat with Dominion wheat eligible to enter duty-free.

While official information on the subject is limited, several reasons for this choice can be found. The British grain trade as a whole strongly opposed the adoption of import quotas for wheat, as certain to disrupt the normal course of importation, milling, futures trading, and price registration in the Liverpool and London markets, which are, in a real sense, the center of the world wheat trade.² Import quotas for animal products involved no comparable considerations. The British milling industry in particular expressed vigorous opposition; and representatives of the industry, who accompanied the British delegates to Ottawa, subsequently claimed credit for bringing about the rejection of wheat import-quota plans.³ British millers did not oppose low tariff duties on wheat; indeed, when some form of protection to Brit-

¹ *The Times* (London), December 12, 1931, p. 6; 260 H.C. Deb. 5 s., 2320–24.

² See, for example, a brief letter from the Directors of the Liverpool Corn Trade Association, Ltd., to the Secretaries for Agriculture and the Dominions, December 17, 1931, quoted in the Association's annual report for 1931–32.

³ *Milling*, April 16, 1933, p. 401.

ish wheat growers had become politically inevitable, the millers had urged that a combination of a moderate duty with Empire preference and a subsidy to domestic growers would be the least objectionable form.¹

Moreover, none of the Dominion delegations at Ottawa demanded an import quota for wheat. Australian political leaders had earlier been active in urging some form of Empire preference. At an Imperial Economic Conference held in London late in 1923, Mr. Stan-

ley Bruce, who was then Australian Prime Minister, had put forward a scheme for an import board as an alternative to protective tariffs with Dominion preference which he really preferred. In later years Australian sentiment had favored quota schemes. On April 12, 1932, however, the Australian Secretary of Markets publicly stated objections to a quota for wheat, and said that the Commonwealth government would not "encumber its case at Ottawa with requests for preferential treatment as regards wheat and wool."² At Ottawa Mr. Bruce was leader of the Australian delegation. On July 22, 1932, he spoke of the plight of Australia's two major industries, wool and wheat.³ Speaking of wool, he said:

Unfortunately, Great Britain is not in a position to render assistance to this major industry. Wool is one of the commodities of which the Empire production is far in excess of Empire requirements, and the great bulk of our wool clip must necessarily be marketed outside the Empire. We cannot see that the position of the wool grower can be improved until world prosperity is restored and wool values improve materially.

He said further:

As far as preferences are concerned, the position of wheat is also difficult. We in Australia have so far not succeeded in formulating a definite proposal, but we shall look forward with interest to discussions upon this most important Empire product with the British and Canadian delegations.

Obviously, therefore, Australia's official position at Ottawa was that neither import quotas nor tariff preference would help on wheat or wool. As between the two, however, technical opinion in Australia favored quotas over tariffs.

The provincial wheat pools went on record as opposed to both a quota system and a preferential tariff, on the ground that the benefits of either were likely to be slight and the dangers considerable.⁴ Another influential group of wheat growers took a much more vigorous position against a quota system, but registered only mild opposition to tariff preference with a low duty. The eventual adoption of the wheat duty was generally (and probably correctly) ascribed to the insistence and personal force of the Canadian

¹ See WHEAT STUDIES, July 1933, IX, 329. The same position was taken by the Liverpool Corn Trade Association in the letter cited above.

² *Milling*, April 16, 1932, p. 423.

³ *Imperial Economic Conference at Ottawa, 1932: Appendices to the Summary of Proceedings . . .*, Cmd. 4175, p. 108.

⁴ The *Eighth Annual Report of the Saskatchewan Co-operative Wheat Producers Limited* (Regina, 1932) includes a memorandum prepared jointly by the boards of the three pools in which matters to be discussed at the Imperial Conference were considered. The conclusions on the point here at issue are as follows:

"1. *The Dominion Wheat Quota*

"(a) Inasmuch as the details of a quota have never been officially revealed, it is impossible to judge accurately the effects of such a proposal. We can see that any such proposal might work to our advantage in giving us a greater share of the U.K. market, but the advantage in ordinary times would be more apparent than real, inasmuch as the greater portion of our exportable surplus must go elsewhere.

"(b) We cannot see that the Quota System would have any appreciable effect on wheat prices. Only under the circumstances of an abnormally short crop in Canada can we conceive that the Canadian producer would get more for his wheat or the British consumer pay more for his bread than if a quota were non-operative.

"2. *The Wheat Preference*

"(a) Inasmuch as in our judgment, trade restrictions and tariff barriers in foreign countries have been particularly effective in disturbing the marketing of Canadian grain, we cannot view with favour the extension of this principle in Empire countries.

"(b) On purely economic grounds we can find no evidence to prove that a preferential tariff will appreciably raise the price of Empire wheat.

"(c) The preference might increase the share of Empire wheat used in Great Britain, but, as compared to a specific material increase under a quota, the gain from a preference would be doubtful.

"(d) A preferential tariff for Empire wheat may result in retaliatory tariffs in foreign countries. If such a result occurs the consequences to Canada would be disastrous.

"3. *Wider Markets*

"We believe that the only hopeful and permanent solution of the grain marketing problem is for wider and freer markets as the bulk of our surplus must continue to be sold outside the Empire."

Premier, who had long regarded Empire preference in some form as a cardinal feature of his program. Failure to secure it in some form would presumably have injured his prestige, though it is doubtful whether it would have aroused keen disappointment among wheat growers or exporters either in Canada or in Australia.

The rate of duty on wheat was agreed upon at the Ottawa Conference, and specified in the formal agreements there made by official representatives of the United Kingdom with those of Canada, Australia, and India. Apparently the rate was decided *in camera* by the leaders of these delegations at Ottawa.

In the customary procedure for determining a tariff duty in Great Britain, whenever domestic producers seek tariff protection, public hearings are held. Prior to the establishment of the Import Duties Advisory Committee, the Board of Trade performed the same functions. These hearings are open to proponents and opponents. Proponents advance their claims; importers and representatives of foreign countries hand in their protests; consumers may present arguments against the proposed import duties. A case for protection has to be made out, and the degree of import duty justified. Records of such hearings indicate that painstaking examinations are made in order that claims for protection may be equated with the equities of the consuming classes. The duty is set in accordance with the theory of the particular tariff under consideration.

In the case of the wheat duty, no such procedure was followed. Neither the Import Duties Advisory Committee nor the Board of Trade itself held any public hearings on the subject, either before, during, or after the Ottawa Conference.¹ The accredited representatives of the grain trade and the milling industry were not sought out for information or opinion, though they may have been consulted informally. The Food Council is not known to have presented any formal report on the subject to the Board of Trade.

The departure from the usual procedure is not difficult to explain. The duties agreed upon at Ottawa were not imposed under the Import Duties Act, 1932; hence they did not

come under the jurisdiction of the Import Duties Advisory Committee. Moreover, they were agreed upon in response to demands not from British producers, but from Dominion governments. Public opinion in Great Britain had been well prepared for a substantial extension of the experiment with Empire preference and was favorably disposed toward such action. The National government had such powerful support in Parliament that it could afford to go as far as it did without referring the matter to any official agency for investigation and public hearings. The result is that we find no public statement of the reasons for fixing the wheat duty at 2s. per quarter.

It is our understanding that a Preparatory Economic Committee considered and presumably made recommendations on tariff rates to the Imperial Economic Conference. The deliberations and recommendations of the Preparatory Committee belonged to the confidential records of the Conference, and have not been made public. Therefore we possess no information bearing on any technical considerations involved in the setting of the duty at 2s. per quarter.

In the absence of official reports or statements on the subject, the reasons for fixing so low a rate can only be inferred. Clearly the British government wished, "on principle," to avoid the appearance of a "tax on bread"; thus it can be taken for granted that the government wished to have the duty fixed at the lowest figure acceptable to Canada and Australia. In view of the lack of home pressure for any preference on wheat, the Canadian and Australian leaders were evidently satisfied, at least initially, with a rate of 2s. per quarter. Obviously no Dominion monopoly of wheat imports was contemplated, for the agreements specifically provide for removal of the duty in the event that adequate supplies of Empire wheat are not available at "world prices."² So low a rate was re-

¹ No references appear in the Conference reports (Cmd. 4174 and 4175).

² Article 4 of the Agreement with Canada (and similarly Article 5 of the Agreements with Australia and India) provides "that the duty on foreign wheat in grain, . . . as provided in this agreement, may be removed if at any time Empire producers of wheat

garded by British trade and milling interests as relatively inoffensive. It also avoided altercation with Argentina, at a time when negotiations of a bilateral trade agreement were in the preliminary stage. Perhaps the rate was frankly experimental.

If, however, the Prime Ministers of Canada and Australia had referred the question to experts in their countries, the advice would have been given that a duty of 2s. per quarter on foreign wheat could not be expected to give an effective preference to Empire wheat, in the sense already mentioned. If the British delegation leader (Mr. Baldwin) had consulted the Liverpool Corn Trade Association and the Baltic Exchange, the same advice would have been rendered. A casual survey of wheat prices in the United Kingdom since the war shows that the range tends to be wider than 2s. per quarter. From the beginning, the trade in the exporting Dominions and in the importing United Kingdom foresaw that an import duty of this amount would

not exclude Argentine wheat in the event of a normal crop, nor German and French wheat in some years, nor Russian wheat whenever Soviet authorities desired to export it. It was realized that, so long as the Chicago price stood close to or above the Liverpool price, American wheat would be excluded through the combined influence of the price position and the import duty; but if the Chicago future were to fall to export parity with the Liverpool future, the duty would tend to be ineffectual just as in the case of Argentina, though not to the same extent. In short, the wheat trade was convinced that the duty was too low to accomplish the avowed purpose, and regarded the "preference" as a political gesture, in furtherance of imperial solidarity in a scheme of relationship within the British Commonwealth of Nations. Since the trade, however, would have preferred no duty at all, it had no reason to complain because the rate of duty was fixed at a very moderate level.

II. THE WHEAT STATUS OF THE BRITISH EMPIRE

Before entering upon the discussion of the prospective effects of the preferential policy, it is essential to set forth certain facts regarding the wheat status of the United Kingdom, the Dominions, and the Empire as a whole. Three questions can be put: (1) Does the Empire produce enough wheat for its needs, or more? (2) In what proportions has the United Kingdom drawn its wheat imports from within and without the Empire? (3) Could the United Kingdom readily satisfy its qualitative requirements for wheat from within the Empire? Answers to these questions help to explain the demand for Empire preference, and to indicate some of the conditions that will affect the way in which the preferential system will operate.

THE EMPIRE ON BALANCE A WHEAT EXPORTER

The United Kingdom has long been, and seems likely to remain, the world's largest

single net importer of wheat. In the second half of the nineteenth century, as British wheat requirements expanded greatly while her domestic crops declined under free trade, Great Britain drew wheat imports only in limited degree from within her far-flung Empire and in increasing measure from foreign countries, notably the United States, Russia, and Argentina. In the twenty years before the war, as wheat production expanded in Canada and Australia while wheat exports from the United States declined, British wheat imports were drawn in increasing proportion from within the Empire. Yet in the five years immediately preceding the outbreak of war, net exports of wheat from Canada, India, Australia, and New Zealand, which averaged slightly over 200 million bushels a year, fell some 8 per cent short of equaling British imports of wheat and flour; and other parts of the Empire were net importers of moderate quantities.

Ever since the war, however, Canada and Australia alone have annually exported more wheat than the United Kingdom and Irish

in grain are unable or unwilling to offer [it] on first sale in the United Kingdom at prices not exceeding the world prices and in quantities sufficient to supply the requirements of the United Kingdom consumers."

Free State have imported. In every year the net exports of the net-exporting Dominions have exceeded the net imports of the net-importing parts of the Empire. For the decade ending with July 1933, net exports of Canada, Australia, and India have exceeded net imports of the United Kingdom and the Irish Free State by 70 per cent. Since Canada in recent years has diverted considerable wheat to feed use and piled up abnormal carryovers of exportable wheat, the foregoing comparison of net exports and net imports understates the extent of the exportable surplus of the Dominions and the Empire as a whole.

Table 1 summarizes the significant figures for the five calendar years 1926-30. The gross exports of wheat and flour (in terms

average export of the three countries at 392 million bushels. The net imports of the United Kingdom and the other units of the Empire averaged 267 million bushels. Much of these imports came from outside of the Empire. If during this period all the stated import wheats of the net-importing units of the Empire had been secured from Canada, Australia, and India, and had total exports and imports of the Empire been the same, on the average 125 million bushels of Empire wheat would have had to be disposed of outside of the Empire.

The obvious conclusion, that the Empire has occupied the position of a substantial net exporter of wheat during this five-year period, would not be changed if the period were extended to cover the past ten or twelve years.

TABLE 1.—EXPORTS OF WHEAT AND FLOUR (AS WHEAT) FROM PRINCIPAL EXPORTERS OF THE BRITISH EMPIRE, AND NET IMPORTS OF UNITED KINGDOM AND VARIOUS PARTS OF THE EMPIRE, 1926-30*

(Million bushels)

Year	Canada	Australia	India			Total exports from Canada, Australia, and India ^b	Net imports			Excess of exports over imports
	Exports ^a	Exports ^a	Exports	Imports	Net exports		United Kingdom	Various importing parts of the Empire ^c	Total	
1926	298.9	75.2	11.6	1.8	9.8	383.9	195.9	53.3	249.2	134.7
1927	298.3	106.0	15.9	3.4	12.5	416.8	223.1	54.4	277.5	139.3
1928	415.5	81.2	9.0	6.0	3.0	499.7	203.7	55.2	258.9	240.8
1929	255.6	100.9	5.0	26.9	(21.9) ^d	334.6	221.0	61.7	282.7	51.9
1930	242.8	76.7	11.9	7.3	4.6	324.1	213.9	51.4	265.3	58.8
Average.....	302.2	88.0	10.7	9.1	1.6	391.8	211.5	55.2	266.7	125.1

* Based on data obtained from *Yearbooks of International Institute of Agriculture and Accounts Relating to Trade and Navigation of the United Kingdom*. Flour converted to equivalent bushels of wheat at 70 per cent extraction.

^a Imports are disregarded because of their negligible size.

^b Sum of gross exports of Canada and Australia and net exports of India.

^c Including Egypt which, though nominally independent, stands in a peculiarly close relation to the United Kingdom.

^d Net imports.

of wheat) of Canada, Australia, and India to all destinations during the five calendar years 1926-30 averaged 401 million bushels. Disregarding the trivial gross imports of Canada and Australia, we must, however, subtract the gross imports of India (almost wholly from Australia), which averaged for the period 9 million bushels a year,¹ leaving a net

¹ The gross import of India during 1929 was by far the heaviest since the war. Part of the Indian use of imported wheat is fairly constant, a so-called "luxury" use; another part depends on price. The imported Australian wheat is consumed mostly in Bombay and Calcutta.

These years have contained at least the usual proportion of crop failures. The climatic menaces to which the wheat crops are exposed in the important wheat-producing countries of the Empire are quite different. Years when all or even two of the three principal exporting countries of the Empire have abnormally low crops, such as 1919, are comparatively rare. Furthermore, it is to be kept in mind that the crop year in the Northern Hemisphere overlaps that in the Southern Hemisphere.

Since early in the post-war period Canada

has been easily the largest single exporter of wheat; indeed, in only one year (1924-25) of the past eleven has Canada failed to rank first. In the ten years ending July 1933 the net exports of Canada alone have averaged 281 million bushels, considerably more than the net imports of the United Kingdom, the Irish Free State, and other net-importing parts of the Empire. Canadian acreage sown to wheat rose strikingly between 1925 and 1932. Yields per acre sown, and consequently crops and export surpluses, have fluctuated widely. Yet with average yields on the recent levels of wheat acreage, Canada's pre-eminent position as a wheat exporter seems assured. In spite of distressingly low prices for wheat and several seasons of adverse weather conditions, contraction of Canadian wheat acreage meets resistance. Abundance of land available for wheat and lack of promising alternative uses of the land in wheat conspire to make the underlying trend of acreage upward.

In the past three years Australia, formerly in the third or fourth place as a wheat exporter, has come to rank second to Canada alone. Whereas Australia's wheat exports had not averaged as much as 100 million bushels in any three-year period up to 1929-30, in each of the past three crop years they have exceeded 150 million bushels. Wheat acreage there expanded notably from 1925 to 1930, and has since been on the lower but still high level of 1928 and 1929. For much the same reasons that apply in Canada, there is resistance to acreage contraction, and the basic trend is still upward. Yields per acre, and consequently production and exports, fluctuate considerably, though less than in earlier years and much less than in Canada.

India has ceased in recent years to be an important exporter of wheat. Rapid growth of population and some increase in per capita consumption have increased domestic requirements; acreage has tended slightly upward, but yields per acre, which fluctuate within moderate limits, have averaged lower than before the war. Owing to moderate or poor crops in several recent years, and to unattractive export prices in others, India's wheat exports have been very small since 1924-25.

Indeed, in consequence of a liberal excess of imports in 1928-29 and a balance of smaller net imports in 1930-31, India's exports have been approximately balanced by imports over the past eight years. If India chances to have a big crop in a year of high prices in world wheat markets, she may again appear as a substantial exporter; under reverse conditions, her import purchasing power permitting, she may occasionally be a moderate net importer. There is no early prospect of India's becoming a regular factor of importance in international wheat trade.

Under new wheat policies adopted in 1932 and 1933, both the United Kingdom and the Irish Free State are increasing their domestic wheat production, and thus somewhat reducing their wheat import requirements. New Zealand, before the war a small wheat exporter, has been a small net importer since the war each year except in 1922 and 1933; her present policy is directed toward self-sufficiency in wheat. The Union of South Africa, also a small net importer, has substantially increased her wheat acreage and production in the past decade; and her wheat imports, which reached a maximum of 8.8 million bushels in 1928, averaged only 2.2 million in 1930-32. Practically all of the numerous scattered units of the Empire are net importers, but in the aggregate by only a small amount. Net imports of Egypt, which (though nominally independent) may for some purposes be considered part of the Empire, have averaged about 10 million bushels a year in the past five years.

Without going into further details, we think it reasonable to expect that the British Empire, barring highly exceptional circumstances, will continue annually to produce much more wheat than the Empire itself requires. The amount, and to some extent the location, of the surplus will vary from year to year. It is subject to influence not merely by Nature and farmers' intentions, but by wheat policies that stimulate acreage expansion or compel acreage contraction. On the whole, it seems to us probable that the net exportable surplus of the Empire will continue to average upward of 100 million bushels a year, in most years largely from

Canada. This status is fully accepted in Great Britain. This is a large figure considered in relation to the crops and requirements of the Empire; it is a still larger figure considered in relation to importers' requirements and exporters' surpluses in the world. Under Empire preference, as without it, the Empire has a wheat-surplus problem.

BRITISH IMPORTS AND DOMINION EXPORTS OF WHEAT

Although the exporting Dominions have, in the past decade, exported more wheat than the United Kingdom and other importing parts of the Empire have imported, the imports have by no means all been secured from within the Empire. The wheat imports of the United Kingdom vary, according to origin, in accordance with prices, qualities, and conditions in shipping and exchange. For the present purpose it is sufficient to analyze the imports of the United Kingdom for the calendar years 1926-30.

The gross imports of wheat and flour (as wheat) into the United Kingdom are separable into those from the United States, Canada, Australia, Argentina, India, and other countries (including Russia). The failure to separate Russia is due to the fact that for several years imports from that country were included in the figure for "other countries" in the official reports; this was important only in one year of the five, 1930, when imports from Russia were heavy. The statistics of imports from all sources except Canada and the United States accurately reflect importations from the countries designated; but imports from North America do not show correctly whether the wheats originated in Canada or the United States.

Canadian wheat going to the United Kingdom (and to other countries) is shipped out of United States Atlantic ports as well as out of Canadian Atlantic and Pacific ports. Also, United States wheat going to the United Kingdom (and to other countries) is shipped out of Canadian Atlantic ports as well as out of United States Atlantic and Pacific ports. No such cross-shipments occur through Pacific ports of either country. The reporting services at the Great Lakes and Atlantic ports

have not, until very recently, been developed for the United States and Canada to the point of permitting accurate specification of the amounts and destinations of the wheats of each country passing out of the ports of the other.¹ In the import statistics of the United Kingdom, Canadian wheat is not separated from United States wheat in the figures for imports from the United States, nor is United States wheat separated from Canadian wheat in the figures for imports from Canada. In recent years, however, the error has been mostly in one direction, and for the present purpose this may be approximately corrected.

During the five years 1926-30, Chicago futures have tended to stand above the Winnipeg and Liverpool futures, quality and shipment costs considered. The American wheats passing through private hands out of the St. Lawrence have been largely durum wheats. Hard spring wheat the United Kingdom was able to purchase more cheaply in Canada than in the United States; of durum wheat the United Kingdom has imported little, and this was as cheaply available, as a rule, in Canada as in the United States. During these years little hard winter wheat has gone abroad through Atlantic ports; such wheats of this type as the United Kingdom imported must have gone mostly through Gulf ports. Of the small quantities of soft red winter wheat exported, the United Kingdom is known to have taken only insignificant amounts. The United States flour exported through Atlantic ports to the United Kingdom was almost entirely flour ground in Buffalo from Canadian wheat in bond. From these several circumstances may be drawn the inference that during these five years only small amounts of United States wheat went to the United Kingdom from northern Atlantic ports, Canadian or American. On the other hand, during the winter months large amounts of Canadian wheat went to the United Kingdom through United States Atlantic ports.

Under these circumstances, we may adjust the figures and secure approximate data for

¹ We are informed that the Canadian government has now developed measures which show the ultimate destination of all Canadian wheat exported; but such data are available only from 1931.

imports into the United Kingdom of Canadian and United States wheats, respectively, by making the slightly exaggerated assumption that during this period no United States wheat went to the United Kingdom through Canadian Atlantic ports. If then we subtract from the United Kingdom figures for imports from the United States the figures reported by our Department of Commerce as exports of domestic wheat to the United Kingdom, we obtain approximate figures for Canadian wheat exported to the United Kingdom through the United States; and when these are added to the reports of direct importation of Canadian wheat into the United Kingdom, approximations of the gross imports of Canadian wheat are obtained. Adjusted in this manner, we obtain the data given in Table 2. While the

of wheat and flour (as wheat) were 1,122 million bushels, of which 227 million came from Argentina, around 170 million from the United States, 90 million from Russia and "other countries," and 635 million from Empire sources. In terms of percentages Argentina contributed 20 per cent of the supply, the United States only 15 per cent (and part of this was flour ground from Canadian wheat in the United States). The percentage contributed by "other countries" has little meaning since most of the wheat concerned came from Russia during one season—1930. That is, during 1926–30 around 57 per cent of the imported wheat originated within the Empire, and around 43 per cent came from outside of the Empire. In other words, in 1926–30 the United Kingdom drew, on the average, nearly

TABLE 2.—GROSS IMPORTS OF WHEAT AND FLOUR (AS WHEAT) INTO THE UNITED KINGDOM, BY COUNTRIES OF ORIGIN, 1926–30*
(Million bushels)

Calendar Year	North America (U.K. data)			United States (U.S. data) ^a	Canada adjusted ^b	Australia	India	Argentina	Other countries	Grand total	Three Empire countries	All other countries
	United States	Canada	Total									
1926	65.5	80.9	146.4	44.6	101.8	20.6	5.0	24.3	11.6	208.0	127.4	80.6
1927	74.3	73.7	148.0	49.3	98.7	32.4	9.4	38.5	7.1	235.4	140.5	94.9
1928	49.3	89.6	138.9	18.3	120.6	21.7	2.9	47.7	5.9	217.1	145.2	71.9
1929	48.3	60.7	109.0	27.9	81.1	27.4	.3	86.7	11.1	234.5	108.8	125.7
1930	47.8	60.9	108.7	30.3	78.4	28.3	6.2	29.9	54.2	227.3	112.9	114.4
Average	57.0	73.2	130.2	34.1	96.1	26.1	4.8	45.4	18.0	224.5	127.0	97.5

* Based (except as otherwise indicated) on data obtained from *Accounts Relating to Trade and Navigation of the United Kingdom*. Flour converted to equivalent bushels of wheat at 70 per cent extraction.

^a Data from *Foreign Commerce and Navigation of the United States*.

^b Difference between figures in third and fourth columns; see explanation in accompanying text.

adjustment cannot be regarded as accurate,¹ it cannot be far wrong; and with it we can reach a satisfactory measure of importations of Empire and foreign wheats into the United Kingdom over the calendar years 1926–30.

During these five years the gross imports

¹ The adjusted estimates of Canadian wheat exported to the United Kingdom through all North American ports cannot be checked with the use of the Canadian reports. Canada has reported exports through United States ports separately from exports through Canadian ports, but included exports on "orders" with those to the United Kingdom. Exports on "orders" are large, sometimes indeed predominating; in 1928, for example, when the combined imports into the United Kingdom from Canada and the United States were 139 million bushels, the Canadian exports to the United Kingdom and "orders" were 250 million bushels.

100 million bushels of wheat per year from countries outside the Empire, leaving a corresponding amount of Dominion wheat to find markets outside the Empire in addition to the export surplus over Empire requirements.

To many, not only in Canada and Australia but in the United Kingdom itself, this situation has seemed anomalous and deserving of correction. Empire preference was ostensibly adopted as a device for correcting it.

The relations between gross and net imports of wheat and wheat flour may be slightly modified by Empire preference. During the five years 1926–30, of the gross wheat imports of 984 million bushels, 7 million bushels were re-exported as grain. (See Table 3.) Im-

ported Empire wheat will continue to be re-exported; but foreign wheat will not continue to be re-exported, because there is no provision for bringing in foreign wheat duty-paid and having the duty refunded on re-exportation of the identical wheat. The small re-exports of flour—the equivalent of only 1½ million bushels—can be continued because refund of duty is provided. There was, however, an export of British-ground flour equivalent to 56 million bushels of wheat, largely imported grain. This trade is somewhat handi-

United Kingdom find within the Empire not merely the gross quantity of wheat needed but also the types, varieties, and grades of wheat to produce her customary supply of flour? In this matter we are not concerned with statistics but with the technical practices in milling and baking. Our view that the available Empire wheats can be made to meet the qualitative requirements of the United Kingdom has been confirmed for us by expert advices from the grain trade and milling industry in Great Britain.

TABLE 3.—UNITED KINGDOM IMPORTS, EXPORTS, AND RE-EXPORTS OF WHEAT AND FLOUR (AS WHEAT), 1926-30*
(Million bushels)

Year	Imports			Exports	Re-exports		Total exports and re-exports	Net imports		
	Wheat	Flour as wheat	Total	Flour as wheat	Wheat	Flour as wheat		Wheat	Flour as wheat	Total
1926	179.7	28.4	208.1	10.8	1.1	.3	12.2	178.6	17.3	195.9
1927	206.2	29.2	235.4	11.2	.8	.3	12.3	205.4	17.7	223.1
1928	193.3	23.8	217.1	11.7	1.4	.3	13.4	191.9	11.8	203.7
1929	208.6	25.9	234.5	11.5	1.8	.2	13.5	206.8	14.2	221.0
1930	196.0	31.3	227.3	10.7	2.2	.5	13.4	193.8	20.1	213.9
Total	983.8	138.6	1,122.4	55.9	7.3	1.6	64.8	976.5	81.1	1,057.6
Average	196.8	27.7	224.5	11.2	1.5	.3	13.0	195.3	16.2	211.5

* Data from *Accounts Relating to Trade and Navigation of the United Kingdom*. Flour converted to equivalent bushels of wheat at 70 per cent extraction.

capped by the duty on non-Empire wheats. The Import Duties Advisory Committee has been asked to recommend drawback of duty in such cases. Favorable action would remove the only internal obstacle to this trade.

QUALITATIVE ADEQUACY OF EMPIRE WHEATS

The question now arises, Has the heavy importation of non-Empire wheats by the United Kingdom been due to quality factors? It is not enough that Empire wheat should cover Empire requirements in quantity; it is also necessary that the Empire wheats should possess the qualities to which the people of the United Kingdom are accustomed.¹ As bearing on the prospects under Empire preference, we may ask: Can the

The British have long possessed wide choice in types, varieties, and grades of wheat, at varying price differentials. They have perfected their milling and baking practices to take the fullest advantage of these circumstances. Roughly speaking, domestic wheat represents less than a sixth of the mill mixture of the country. Soft wheats, red or white, have been available from Australia, northern Argentina, the United States, India, and Germany. Semi-hard red winter wheats have been available from the United States, Australia, Argentina, Russia, and the Danube countries. Hard red wheats, spring or winter, have been available from the United States, southern Argentina, the Danube countries, Russia, and Canada. The British miller has learned to blend these different wheats in varying proportions so as largely to avoid paying premium prices for any one. The British millers have never had to face a simultaneous

¹ It is worthy of comment that in Canada and Australia the bread is made out of wheat of a narrow range of types and qualities.

crop failure of winter wheat in the United States and Argentina; but they would make the necessary adaptations in such a case.

There is a large biscuit trade in the United Kingdom which demands a soft flour, made of either red or white soft wheat. Most of the domestic wheat goes into biscuit flour, supplemented by wheat from Puget Sound, the eastern United States, Australia, and Germany. The biscuit flour is much the same for all parts of the United Kingdom; since it is made mostly for factory trade and bake shops, the blending of wheats to make a uniform product is relatively simple.

Home baking of bread is no longer extensively practiced in the United Kingdom, except in a few country regions. Bakery bread is turned out of plants varying from small primitive bakeshops to large modern bakeries. In Scotland strong flour is preferred in many shops and households. In southern England the quartern loaf often resembles that of France. The traditional type of bread is not extremely aerated and does not demand very strong flour, though the large bakeries are progressing in this direction. Though Americans might not regard the specifications of English bread as exacting, English consumers are probably more particular than Americans about their bread.

A blend of wheat for bread flour in the United Kingdom is a mix of three kinds of material: *backbone*, *strengtheners*, and *filler*. These are relative terms and overlap, varying considerably under changing circumstances of prices. It is not so much the kind of wheat as the function which is described in these three terms, except that the function of strengthener is associated with high-protein hard wheats. A good illustration would be average-grade Argentine or Australian wheat as backbone, Canadian spring as strengthener, and a fair grade of cheap wheat of almost any type as filler. Top-grade Canadian spring wheat has been used especially as strengthener; but grades 4-6 may be used also as backbone or as filler. Standard Argentine wheat is a common backbone, softer northern Argentine wheat is often used as filler, and harder southern Argentine wheat may be used as strengthener. Selected

Australian wheats are highly prized as backbone. Soft red or white wheats are often used as fillers; but they may be used as backbone if hard spring or winter wheats from Canada or Russia are cheap enough to be used in large amounts as strengthener.

Millers follow tradition and habit as well as science. Some hold that a small amount of Argentine (or American hard winter) wheat is necessary to British flour, even at a slight increase in cost. Some regard it as superfluous, unless at a saving in cost. Probably most port mills would use 20 to 30 per cent of high-grade Argentine wheat at the same price as No. 1 Manitoba, and would use up to 40 or even 50 per cent, if thus a saving could be accomplished.

Certain technical difficulties attend the milling of heavy proportions of hard Canadian wheat. In Scotland, the mills are prepared to turn out very strong flour and some of them could mill Canadian wheat straight. In England, where softer flours are used, some mills would need to make changes to grind a mixture containing over 50 per cent of Canadian wheat. Therefore the Scotch mills have no incentive to import Argentine wheat, whereas the English port mills have an incentive to keep down the proportion of Canadian wheat by using large amounts of Australian and Argentine wheats. The ideal English mixture, technically and from the standpoint of characteristics of flour, contains Canadian, Australian, and Argentine wheat, the first possibly not over a third and the last preferably as much as a third.

To blend Empire wheats into standard uniform flour, without the use of foreign wheats, would require some added ingenuity on the part of millers. This, however, lies within their arts, price permitting. Under Empire preference, the profit motive lies in the import duty of 2s. a quarter; at current levels of prices this constitutes a fairly heavy price differential.

If the preference were so effective as to exclude foreign wheats altogether, the British mills would blend Canadian and Australian wheats in somewhat larger proportions than has been the custom. There would be more Canadian and Australian wheats used

as backbone instead of Argentine. Flour would contain more backbone and strengthener and less filler. Russian wheat would be lost as strengthener, but the Canadian wheat is quite as good. The lower-grade Canadian wheats and the harder Australian wheats would be more widely used. Argentine wheat would be lost as filler, which would create no problem for the miller. Puget Sound flour would be replaced by flour ground from Indian and Australian wheat. Good flour can be made from a blend of two-thirds Australian and one-third Canadian wheat. German wheats have had no peculiarly desirable qualities, have offered little apart from price, and would be completely dispensable. So long as Empire crops were abundant and the normal range of grades available—indeed, except in the event of very short crops in Canada and Australia—the blending to produce a standard uniform flour could be successfully accomplished; and it presumably would be done if the ex-Empire wheats, duty-paid, carried higher prices than Empire wheats.

When the Canadian crop is normal or large, there is a huge volume for export. The crop may be evenly distributed in respect of the six grades; it may contain a preponderance of Nos. 1-3, or a heavy proportion of Nos. 4-6. When the proportion of Nos. 1-3 is short, these go to a premium and enforce enlarged use of Nos. 4-6. It is possible, but unlikely, that a Canadian crop might be so short, and at the same time the proportion of Nos. 1-3 so small, as to bring about a premium on Nos. 1-3 in excess of the tariff duty on comparable hard wheat from outside of the Empire. In the case of a large crop, even when the proportion of Nos. 1-3 is small, the amount available and the qualities of the lower grades are such as to provide British millers with all they need. Sometimes the lower grades are almost as hard as the upper grades, though inferior in other respects. Looking over the past ten years, it is clear that with average Australian crops the Canadian crop would usually have provided sufficient wheat to fill the requirements of the United Kingdom, without a premium exceeding the amount of the duty on non-

Empire wheat. Lower-grade Canadian wheats can be used both as filler and as backbone wheats in the British milling program, price incentive permitting.

The Australian crop offers to Great Britain the wheat for biscuit flour (which requires no strengthener) and backbone and filler wheats for all flour. The crop of Australia varies both in quality and quantity; but the qualitative variations are not so wide as in Canada. Some Australian wheats are quite hard. If the crop of Australia were small or the quality peculiarly poor, this would reduce the amount available to Great Britain. A short crop of customary quality might bring the wheat to a premium; if this premium exceeded the level of duty on foreign wheat, soft wheat would come in from Puget Sound, assuming that the Pacific crop was abundant and of good quality. A survey of the Australian crops during the past ten years suggests that such a contingency would be rare.

It is conceivable, however, that Canada and Australia might have very short crops simultaneously. Since 1922-23 the lowest exportable surplus from an Australian crop and carryover, after allowance for a small outward carryover, was about 60 million bushels, and the lowest from Canada about 190 million bushels. Since the import requirements of the British market usually range from 200 to 225 million bushels, it is obvious that only extreme crop failure in the two countries would reduce the exportable surpluses to such a figure as would be quantitatively insufficient to cover the British import requirements. If, however, such short crops were accompanied in both countries by extremely low quality, it might occur that the customary flours of Great Britain could not be secured from blends of domestic, Canadian, and Australian wheats in such a year, and foreign wheats would be required.

As we have seen, as a wheat exporter India has lapsed into a position of insignificance. If, however, the incentives were sufficiently strong, the possible availability of the Indian supply might be enough to enable Great Britain to confine her imports to Empire wheat in the event of crop failures in Canada and

Australia. But the quality of Indian wheats is very uneven.

While it thus seems clear that British mills could prepare their customary flours from mixtures of Empire wheats, *if foreign wheat duty-paid were more costly*, it is equally true that foreign wheats would be employed instead of Empire wheats, to a considerable extent, if the prices were nearly the same. Average-quality Argentine wheat is highly prized in the British port-mill mix and would be used at comparable prices, to an extent of perhaps a third. In many mills southern Argentine wheat is preferred to No. 3 Mani-

loba. The British miller will grind wheat according to mill policy and not according to imperial policy. Price will determine usage: if Argentine wheat costs more at the mill door than do Canadian and Australian wheats, it will be eschewed; but if the mill-door prices of Argentine and Russian wheats are about the same as prices of comparable Empire wheats, foreign wheats will continue to be used. Of these relations, as we shall see, the first year's test has already afforded illustrations. Empire preference rests upon the height of the import duty on foreign wheat, and this was not set high.

III. PROBABLE EFFECTS OF THE WHEAT PREFERENCE

The consequences of Empire preference as regards effects on trade in wheat and prices of wheat within Empire countries and without, and as regards effects on wheat markets and on trade in other products than wheat, are dependent upon the extent to which the preference is effective in restricting the British market to Empire wheat. In the present section we undertake to consider these questions on two different assumptions: (a) that preference will be fully effective in excluding all non-Empire wheat except in the highly improbable event of quantitative inadequacy of Empire wheat supplies for Empire requirements; and (b) that the preference will be maintained on the present basis of a duty of 2s. per quarter on foreign wheat while Empire wheat is admitted free of duty.

BASIC CONDITIONS

A few circumstances are basic in the appraisal of possible and probable consequences of Empire preference. First is the fact that the Empire as a whole, and Canada in particular, must generally remain an exporter of substantial quantities of wheat to countries outside the Empire. In consequence, Canadian wheat must continue usually to sell in the United Kingdom at prices equivalent to those in ex-Empire countries, transportation and other costs considered. We take it that this fact precludes any possibility of price advantage for Canadian wheat even ap-

proximating the amount of the tariff preference, and renders appraisal of the effect on Canadian wheat prices crucial for appraisal of the effects on most other wheat prices and of such other consequences of Empire preference as hinge on price relationships.

Empire preference must result, other things equal, in some increase in utilization of hard spring wheats in the United Kingdom and consequent decrease in supply available for outside countries. The English milling trade would accommodate itself to such an enforced increase in utilization of hard spring wheats, however, by choosing from the Canadian supply a larger proportion of the grades of lesser hardness and leaving for the non-Empire trade most of the hardest Canadian wheat. In consequence, the supply of Canadian hard spring wheat left for other countries, though substantially reduced in quantity, would be of a quality to go farther as a strengthener in mill mixes. To the extent that the British millers were able to choose among Empire wheats in such a way as to maintain the customary quality of British flour (that is, without increasing its average strength) they would leave for other countries a selection of wheats permitting maintenance of their customary flour qualities and avoiding the development of unusual premiums on hard wheat in non-Empire countries.

Fully effective Empire preference would result in important reorganizations in the

world wheat trade, and less fully effective preference in less radical reorganizations. Artificially induced changes in the routing of trade necessarily result in changes in transportation and other costs and commonly, for the trade as a whole, an increase in the total of these costs. These changes in cost must receive consideration in appraisals of the possible and probable effects of Empire preference on prices in both importing and exporting countries, within the Empire and without, and on the incidence of gains and losses from Empire preference, to the various countries concerned.

EFFECTS ON OTHER NET-IMPORTING COUNTRIES

As regards the effects of Empire preference on net-importing countries outside the Empire, it will suffice to confine the discussion mainly to Germany, France, and Italy. These three countries have until recently been more or less heavy net wheat importers, though latterly they have made great strides toward self-sufficiency in wheat. With bumper crops, France becomes a net exporter and Germany and Italy become net importers to a greatly reduced extent. Germany normally exports soft Baltic wheat; France often exports lower-grade wheat; even Italy occasionally exports wheat. France and Italy have particular requirements for durum wheat, which is ordinarily available in Canada but not in Australia or India; latterly the French requirements have been covered mainly from northern Africa and the Italian in part from Russia. Germany, France, and Italy require variable volumes of imported wheat to cover the customary per capita consumption; still more important, if they are to maintain customary standards of bread quality, they require also considerable amounts of hard spring or hard winter wheat to strengthen the flour. In addition to strengthener wheat, they may import also backbone and filler wheats; but the miller's particular problem concerns the amount of strengthener wheat he needs and the premium he must pay for it.

These strong wheats have in the past been secured largely from Canada, Russia, and southern Argentina, and to a small extent

from Oklahoma and Texas. If the United Kingdom were to cover her wheat requirements with Empire wheat, this would still leave a surplus of hard wheat in an average Canadian crop. The exports of hard wheats of Russia, the Danube countries, and southern Argentina, to the extent that they were shut out of the British market, would be more largely focused on Germany, France, and Italy. Even if in an unusual year the United Kingdom took all the hard Canadian wheat, except in the event of synchronous crop failure in Russia, there would still be enough hard wheat available to meet the usual needs of western European countries and probably with little increase in the premiums on those wheats. The millers of Germany, France, and Italy are very efficient in stretching hard wheat in the mill mix. For a number of years imports of foreign wheat have been restricted by regulation, and the millers have been forced to learn to do without imported strong wheat in the quantities previously customary.

If in some years Germany, France, and Italy might, through the operation of Empire preference, be forced to pay a premium price for hard wheat, probably about as often they would secure backbone wheat and filler wheat at discount prices. The countries of Continental western Europe would represent the favored outlet for Argentine wheat of average grade, excluded from the British market except on payment of duty. In these countries it would meet the average grades of wheat from Russia and the Danube countries. It is these commoner wheats which usually make up the surplus in exporters' supplies; and in some years the system of Empire preference will presumably tend to give Germany, France, and Italy cheaper wheats of the common grades than they could expect if Argentina enjoyed a duty-free market in the United Kingdom.

No one can forecast the net effect on bread prices. Much will depend upon tariff policies, milling regulations, and the varying characteristics of crops. Other things equal, however, it seems to be expected in Germany, France, and Italy that they will obtain slightly lower bread prices, because of the

Empire preference alone.¹ This may be questioned in view of the fact that transportation and perhaps other costs would probably be higher with wheat forced to flow in abnormal channels. But a slight change in either direction in the current high bread prices of these three countries can have little social or economic importance.

EFFECTS ON WHEAT PRICES AND TRADE

The effects of Empire preference which chiefly concern exporting countries are those which will be reflected in prices. The consequences of readjustment in trade and attendant changes in costs of wheat movement are intimately related to the probable price effects. It seems generally to have been assumed in Great Britain that fully effective Empire preference would have no net effect upon the world price of wheat or on the price in the United Kingdom. This view is based on theoretical reasoning rather than on technical considerations, and it is important to indicate the qualifications to be applied to it.

Assuming that Empire preference changes neither the supply of nor the demand for wheat in the world, neither exporters' surpluses nor importers' requirements, but merely the routes of distribution, it is urged that the "price of wheat" would not be modified. It is assumed that the wheat market resembles two reservoirs at different levels, connected by a series of alternative pipes; if the same flow were passed from the upper to the lower reservoir, it would be immaterial through which pipes the transfer were made. On the assumption that the wheat trade of the world occurs in a central open market, with all producers and consumers participating, the prices would not be influenced by changes in the relations of different groups. This theoretical doctrine disregards the common experience that price reflects to some extent not merely quantities in trade, but also technique of trade and relative distribution costs of different kinds of trade.

¹ The domestic wheat policy of Great Britain, involving a substantial levy on domestic flour supplies, is exerting a much more considerable though varying influence on prices of British bread.

In the first place, it is not to be assumed that Empire preference can have no influence on the world supply of or the demand for wheat. It is not unreasonable to anticipate, on the supply side, that producers may be influenced, with or without reason. It is quite possible that wheat growers in Canada and Australia may be led to expect Empire preference to give them an "edge," and consequently feel encouraged to expand their acreage. Also, wheat growers in India, New Zealand, and South Africa may have their ambitions misleadingly aroused by Empire preference. Conversely, it seems possible that wheat growers in the United States and Argentina may feel that the presumptive loss of the British market makes it incumbent on them to contract acreage. The actual outcome in each country and the net effect must be awaited.

The real question is not whether the hypothetical entity called the "world wheat price" (which is a range and not a point) will be modified under Empire preference; the practical question is whether producers' prices or consumers' prices will be significantly influenced in any part of the world. In our view the probability of such effect is not to be denied. Empire preference will increase or decrease the inclusive cost of distribution of wheats from certain exporting countries to certain importing countries. Trade experience is easily cited to illustrate the point.

The United Kingdom is a preferred market. On preferential terms, this market is now supposedly given to Canada, Australia, and India, and is taken from the United States, Argentina, and Russia. The trade in wheat from Canada, Australia, and India to the United Kingdom would be almost semi-automatic under fully effective Empire preference, with the least of risk and cost. The wheat export trade of the United States and Argentina would be more scattered, entailing larger risks and costs. The weighted cost of shipping the exportable surpluses of Canada and Australia to the United Kingdom would be significantly less than the weighted cost of shipping them to a dozen countries. The net cost of selling and delivering Australian wheat to Finland and Greece, for ex-

ample, is more than to the United Kingdom. The concentration of trade is alone an advantage. If Canada and Australia sell three-fourths of their export wheats to one destination and a fourth to scattered destinations, this will be done at a lower average cost per bushel than by the United States and Argentina, when these sell most of their export wheats to scattered destinations. Forty million bushels of Argentine wheat sold to the United Kingdom would be a better transaction, on shipping grounds alone, than 40 million bushels sold to eight different countries.

If Empire trade is made more expeditious and less costly, and ex-Empire trade less expeditious and more costly, this might tend to narrow the margin between producer and consumer in Empire trade and to widen the margin between producer and consumer in ex-Empire trade. The narrowing of the margin in Empire trade, according to the theory of incidence, will accrue to producers and consumers in varying proportions in different years. The widening of the margin in ex-Empire trade will bear on producers and consumers in varying proportions in different years. How significant this may turn out to be, experience alone can reveal; but it seems to us not open to question that effective Empire preference implies facilitation of Empire wheat trade and hindrance of wheat trade outside of the Empire, and that these technical effects will tend to have an influence on producers' and consumers' prices. This will be all the more the case if foreign countries find themselves forced to sell wheat to the United Kingdom duty-paid.

In the inclusive costs of distribution and merchandising are a number of factors of risk and cost. The relations of cash prices to futures prices, the availability of hedging, varying costs of freight and insurance, length of ocean haul, concentration or scattering of shipments, varying relations of back cargo, circumstances of exchange rates between different currencies, influence on trade of creditor and debtor positions, and high or low credit positions of buying countries — all these and others are involved.

Of these, the general consequences of effective

Empire preference on transportation costs are most readily analyzed and would probably prove most important. Wheat movement would be shifted out of natural channels to less natural and more expensive channels, with consequent increase in the total cost of transfer. The added costs might in some instances be wholly borne by wheat and in some instances borne in considerable part by other commodities entering into the trade of which wheat was a part. The added costs borne by wheat, appearing in the form of a wider margin between export and import prices, would fall in varying degrees on producer and consumer, depending on the extent to which the widening of the margin involved decreases in export price, increases in import price, or both.

Among the most significant changes in cost of transportation would be those incident to the increase in the proportion of the Australian crop marketed in the United Kingdom. Under fully effective preference the largest part of the Australian surplus would commonly be taken by the British market, leaving the Oriental import demand (at least outside of India) to be supplied from the Americas. Prices of import wheats in the Orient would tend to be increased, and the cross-shipments of wheat on the Pacific¹ would increase the demand for tonnage to an extent that might lead to appreciable rise in freight rates from Australia to the United Kingdom. The possibilities of freight-rate increases in this trade are larger because wheat now commonly occupies a favored position as return cargo on trips for which other freight pays most of the expenses. A sufficient increase in demand for tonnage for moving wheat would force wheat to bear more rather than less than its share of the costs.

Increases in cost of transportation of Canadian wheat to the United Kingdom will

¹ Shipments of wheat from Australia to Great Britain, beyond the point where they begin to necessitate movement of American wheat to the Orient to meet the demand normally filled by Australian wheat there, may be regarded as involving cross-shipment on the Pacific whether the Australian wheat actually is routed eastward across the Pacific or westward through the Suez Canal.

arise chiefly from the need for concentrating Atlantic shipments more heavily in the autumn period of open navigation on the Great Lakes. This necessity is a consequence of the requirement that Canadian wheat placed in store in the United States for winter movement across the Atlantic loses its Empire status and must pay the duty if imported into the United Kingdom. The weighted effect on transportation costs to British ports will probably be small. Canadian wheat moving to non-Empire countries during the winter months may at times gain some advantage in lowered freight rates owing to the reduced volume of the movement.

Argentine wheat to Continental European destinations will have to bear somewhat increased transportation costs, at the outset at least, owing to the scarcity of return freight to the Argentine from ports to which the wheat moves. British exports of manufactured goods to the Argentine will have to pay heavier freights owing to reduction in volume of return cargo from the Argentine. Broadly there will be a tendency for the present direct movement in both directions between Britain and the Argentine to be replaced in part by a triangular movement involving the carrying of wheat from the Argentine to Continental European ports, travel in ballast to British ports, and carrying of British manufactures back to the Argentine. The added cost of the triangular movement will be divided, in proportions not readily foreseen, between additions to freight on Argentine wheat and additions to freight on British exports. The reallocation of the wheat trade, however, aided by other phases of Empire preference, will tend to have extensive ultimate effects in bringing about a reallocation of other trade, with reduction of British exports and increase in exports from Continental Europe to the Argentine which might soon remove the tendency for Argentine wheat to have to bear increased freight rates to Continental European ports.

If the United States should resume heavy exportation of wheat, the effects on transportation costs would be broadly similar to those bearing on Argentine wheat, but less, owing to the greater extent and variety of

the other foreign trade of the United States. If the United States should remain a very light exporter of wheat, the effects upon transportation costs in connection with such exports would be negligible.

EFFECTS ON EXPORTERS

Among units in the Empire, Australia stands to gain most from fully effective Empire preference. In years of small Australian crops, with her full export surplus required to meet the British demand for imported soft wheat, the price of Australian wheat in the British market might be determined by the price of foreign soft wheat duty-paid, giving Australian wheat nearly the full preferential advantage. Prices in Australia would rise less owing to higher ocean freights, but might gain substantially. In years of large Australian crops leaving some surplus for sale outside the Empire, Australia might be expected still to gain from Empire preference, because her surplus to be sold in the Orient and in other markets where she has a marked transportation advantage would be much smaller than otherwise.

The price advantage to Canadian wheat from Empire preference, in the usual case of a large surplus requiring to be sold in non-Empire markets, would be limited to the gain in price available in those markets in consequence of the decreased supply of hard wheats available to them. Quantitatively the decrease would be substantial, since effective Empire preference would usually exclude little foreign hard wheat from the British market and would lead to larger utilization of the hard Canadian wheat of middle grades in Britain. In view of qualitative adjustments that would be made by British mills, however, it may be questioned whether Canadian wheat as a whole would often find itself in a much more favorable position in non-Empire markets than it would without Empire preference. British millers, as we have noted, would tend to choose chiefly the less-hard Canadian wheats for their own use and leave the hardest wheats for the foreign market. Probably in general they would be able to avoid substantially increasing the average

strength of British flour. If so, they would leave for non-Empire markets a smaller amount of Canadian wheat, but wheat averaging enough harder than customary to offset nearly if not quite the decrease in quantity, and so limit or prevent the development of unusual premiums on hard wheat in Continental European markets. The facts that Continental European flour demands are readily satisfied with flour of very moderate strength, and that Continental millers have learned to adjust their mill mixes within very wide limits to the supplies of wheat available, would operate strongly to moderate premiums which might tend to develop on hard Canadian wheat if its supply were substantially diminished qualitatively as well as quantitatively.

While the general effect of Empire preference on Canadian wheat prices would usually be slight, there might often occur substantial effects on the price relationships among Canadian wheats, since British millers, if forced to use such larger proportions of Canadian wheat, would avoid the strongest wheats in the Canadian supply and seek the weakest. Under fully effective Empire preference the hardest Canadian wheats might indeed sell in the British market at a discount instead of at a premium relative to the weaker Canadian wheats, other characteristics aside. The final effect of Empire preference would undoubtedly be in the direction of price advantage to the weaker Canadian wheats and of very slight advantage or possibly some disadvantage to the strongest Canadian wheats.

Argentine wheat prices in import markets would suffer from the effects of any general expansion in world wheat production which might result if Empire countries raised more wheat in the expectation of substantial benefit from Empire preference. Loss from this source would probably be slight and certainly would not long continue of appreciable magnitude. A more certain and stronger price-depressing influence would be found in the fact that with Argentine wheat forced into non-Empire markets in larger quantities, most of it would sell at a greater disadvantage compared with harder wheats.

The best hard wheats from Argentina, however, would gain from decreased competition with Canadian wheat. The relative price disadvantage of Argentine wheats in Continental European markets would undoubtedly involve also an absolute disadvantage as compared with prices that might be obtained in the absence of Empire preference. The unfavorable effect on prices of Argentine wheat in importing markets would be reflected back to the exporting markets and the farm, augmented by the effects of increased freight charges.

The effects of even fully effective Empire preference on prices of Argentine wheat would be distinctly moderate, however, in consequence of two circumstances which have been discussed above. To the extent that British millers are able to avoid increasing the average strength of their flour, the decrease in volume of Canadian wheat reaching Continental European markets will be offset by increase in the average hardness of the Canadian wheat available in those markets, with consequent opportunity for use of large proportions of Argentine wheat in mill mixes. In so far as Continental European millers may be forced to reduce the average strength of their bread flour, their facility in adjusting themselves to changing wheat supply situations will greatly moderate the tendency to force the relatively weak Argentine wheats to a discount.

If, as we judge, even fully effective Empire preference would not operate to the very serious price disadvantage of Argentine wheat, except in years of very large crops, a more moderate degree of Empire preference would bring proportionately less disadvantage. The present duty of 2s. per quarter, while operating theoretically to the disadvantage of Argentina, is unlikely to produce measurable price loss.

The effects of Empire preference on United States wheat prices will depend on our future position in the wheat export trade. If our wheat exports remain as small as in the past year or smaller, the effect of even fully effective Empire preference would be negligible, except perhaps as regards Pacific wheats. If the United States should resume

heavy exportation of wheat, the price effects on the bulk of our exports would resemble the effects on Argentine wheat, differing chiefly in the smaller increase in ocean shipment costs which the wheat would have to bear. Any element of choice hard winter wheat in the United States export total would gain to nearly the same extent that Canadian wheat prices would gain from Empire preference. Pacific wheat, however, might lose substantially owing to its exclusion from the British market without corresponding advantage elsewhere. The Australian wheat which would take its place in that market would be shifted largely from markets to which Australian wheat has been attracted by transportation advantages rather than by special demand for soft white wheat. Pacific wheats would generally have to meet directly the competition of Argentine wheat and would enjoy the advantages of premiums for their peculiar quality much less often than in the absence of Empire preference.

EFFECTS ON WORLD WHEAT MARKETS

There is considerable interest in Great Britain in a purely hypothetical question, namely, the effect on the Liverpool wheat market if Empire preference should result in giving anything approaching a monopoly to Empire producers. This is part of a larger question, and we feel it deserves a short consideration, despite the improbability of such a contingency. There are many commodity exchanges in the United Kingdom devoted to price registration and trading in spot and futures. If these commodities were allocated internationally, these commodity exchanges would be deprived of their functions. We are concerned here only with wheat.

These are important questions. Three of the grain exchanges of the world are at present actively used by foreigners for speculation and hedging: Liverpool, Chicago, and Winnipeg. Kansas City, Minneapolis, Buenos Aires, Rotterdam, and the other futures markets are used almost exclusively by domestic traders. Prices in Chicago, Liverpool, and Winnipeg react upon each other intimately, yet often exhibit striking independence.¹ We should expect the speculating and

hedging of foreigners on these exchanges to tend to keep foreign wheat prices in line with each other; it is domestic traders, powerfully impressed by conditions arising usually within the country, who drive the wheat prices on one exchange out of line with the others.

On each market the volume of trading is of importance directly, because speculation must carry the hedging; and the price movement is influenced both by the volume and by the character of the speculative transactions. Some speculators operate on all three of these markets; big North American professional speculators operate with almost equal freedom in Chicago and Winnipeg. The volume of trading is heaviest in Chicago, next largest in Winnipeg, and least in Liverpool.² Liverpool is known to be a narrow market, and a large volume of purchases or sales of futures would have a heavy price influence; also, an exceptionally heavy volume of hedging would tax the usual volume of speculation to carry it. That domestic speculators in wheat prices operate in larger volume in the United States and Canada than in Great Britain is not to be wondered at; speculation in a surplus country has larger attractions than in a deficiency country. That international speculators operate much more in Chicago and Winnipeg than in Liverpool is due to reasons that need not be entered into here. The influence of Liverpool in the international price registration of wheat depends less upon the operations of foreign speculators in that market than upon the operations of domestic speculators and of hedgers both foreign and domestic.

If the United Kingdom were regularly to cover her wheat requirements from Empire sources, this would tend to reduce speculation and curtail hedging on the Liverpool exchange by traders in foreign wheats not destined to enter the British market. Argentines, if they delivered no wheat to Britain, would tend to have less interest in the Liverpool market than they have now. Contrari-

¹ This subject will be discussed in the November 1933 issue of *WHEAT STUDIES*.

² This statement is warranted, although Winnipeg and Liverpool publish no figures of volume of trading.

wise, Canadian traders would tend to have even more interest in the Liverpool market than they have now. British merchants and millers, if they bought no Argentine wheat, would have less interest in the Buenos Aires exchange than they have now, but they would have even greater interest in the Winnipeg exchange. On the other hand, if Argentine wheats were to come in duty-paid, the Buenos Aires future would retain its significance. Chicago traders would have a lessened interest in the Liverpool exchange, unless they felt that the Liverpool quotations continued to reflect world conditions. British traders and millers would tend to have a lessened interest in the Chicago exchange and a greater interest in Winnipeg transactions, except as they might use Chicago prices to interpret Winnipeg prices. Traders in the United States and Canada would retain their interest in the exchange of the other, since Canadian wheats would continue to compete with American wheats outside of the British Empire.

British hedging of wheat would presumably be somewhat modified under effective Empire preference. Australia and India have no grain exchanges, and their wheats are sold on the basis of adjusted fair average quality. The guiding wheat future of these portions of the Empire would be that of Liverpool. Winnipeg would be the dominant external influence outside of the United Kingdom.

It is specifically stated in the Agreements Act that under Empire preference the British are to obtain Empire wheat at no more than the "world price."¹ It has been remarked to us by one of the leading grain importers that this provision is "eyewash" for the British public, because inevitably the Winnipeg price would be taken as the world price (quality considered), since no other Empire

future would be available outside of Liverpool. If in certain years Empire wheat supplies should be inadequate for the requirements of the Empire, or even merely small enough to permit Canadians to forego non-Empire exports and hold the Winnipeg price out of line with prices outside the Empire, this provision would provide a basis for reduction of the British duty on foreign wheats. It would assume practical importance, however, only under a duty much higher than the present one.

Under Empire preference high enough to exclude more than insignificant quantities of foreign wheat, the Liverpool price would be based usually on Canadian wheat; in years of large Australian supplies it might be based on Australian wheat. The Liverpool market would often prove an unfavorable one in which to hedge Argentine and similar wheats. This would tend to move some trading from Liverpool to Chicago whenever United States prices were closely tied to foreign prices. With Chicago prices not only above an export basis but moving at variance with "world" prices, the Buenos Aires market might be found the most suitable one for trading which formerly went to Liverpool. If aided by certain changes in trading rules and practices to render it more suitable for international use, the Buenos Aires market might gain greatly in importance. Alternatively, such international trading might go to a Continental European market, such as Rotterdam or Antwerp, leading to great increase in its importance.

EFFECTS ON BRITISH TRADE IN OTHER GOODS

Finally we may ask: What effects will Empire preference have upon the trade of the United Kingdom in other goods than wheat? An important aspect of the effort to restrict import wheats to those of Empire origin concerns the secondary effects on trade in other commodities. Whereas in the Dominions the chief concern is over the direct effects, in Great Britain there seems to be more concern over the secondary effects. The United Kingdom cannot lift its wheat trade out of the foreign world and expect other foreign trade to continue unchanged.

¹ One hears considerable gossip suggesting that the associated British mills buy through one agency—in short, that a quasi-monopoly exists in import and purchase of wheat. On inquiry, this fails of confirmation; the British mills prefer competition in the importing and selling of both Empire and foreign wheat. If a single purchasing agency existed, it would presumably still buy the cheapest wheat, requirements and quality considered, uninfluenced by political considerations.

Wheat imports from Russia have been largely on open consignment; otherwise almost on a barter basis. Russia purchased goods in Great Britain largely through officials, relying on exports of grain to cover the credits; in a direct sense, therefore, the United Kingdom took wheat from Russia in order to sell products (largely capital goods) to Russia. Beyond that, the Russians used their sterling exchange to buy, mostly in the United States. If Russia wishes to continue to buy goods in the United Kingdom under Empire preference, except on credit, she must offer goods that are duty-free (of which she has few) or absorb the duties on protected goods. The circumstances in the case of Russia are more formal than for other foreign countries, on account of the governmental control of foreign trade in Russia; but the inherent implications apply to the balance of trade under any form of government.

In the case of Argentina, the secondary effects of fully effective Empire preference would be particularly striking. It is fair to say that British capital developed Argentina: ports, warehouses, railways, tramways, public utilities, and to a considerable extent public buildings, represent British investments largely. Argentina has a large annual bill due to Great Britain for service charges; and since Argentina produces no gold, the bill must be paid with goods. In addition, Argentina imports large amounts of coal and petroleum, machinery, textiles, and other finished goods. Payment for import goods and service charges is made largely with wheat, maize, flaxseed, hides, wool, and meat. If British imports of these agricultural products were to be substantially reduced, Argentina would have to choose between default on service charges and reduction in imports of British goods. This dilemma, in the midst of the current depression, has already helped to force Argentina off the gold standard, depreciated her currency, led to severe contraction in her imports, and driven her to the verge of default; indeed, for the most part, these service charges are not now being transferred abroad.

If wheat alone were concerned, the situ-

ation would not be so bad. But Argentina has already been given a meat quota which is below her anticipated deliveries to the United Kingdom. In the natural course of events a quota or preferential duty may be applied to wool. Under these circumstances, Empire preference threatens to contribute further to the disorganization of the Argentine economy. It would appear that here Great Britain is doing what her own government spokesmen have accused the United States of doing: after having loaned capital to a foreign country she is now limiting, by quota restriction and otherwise, the amount of goods that she will take in payment. It is significant, however, that in a statement of intentions subjoined to the commercial treaty recently negotiated with Argentina, the British government expressed its intention not to levy new or increased duties or charges on British imports of one list of products from Argentina, or to impose quantitative limitations on British imports of another list; and that wheat, linseed, maize, and quebracho extract appear on both lists and wool on the second.¹

In the case of the United States, Empire preference on wheat into Great Britain holds hardly more than academic interest. We have indeed lost our flour trade with the United Kingdom; but it had been lost earlier, except for flour milled in bond from Canadian wheat. Our wheat exports to the United Kingdom have been very small in recent years. In any event, wheat exports were not needed by the United States to make payments to Great Britain. For Great Britain to refuse imports coming from a country that is creditor to her does not provoke the trade disturbances which follow when she restricts imports from a country debtor to her.

In the broad sense, repercussions throughout the world of trade are likely to follow the establishment of Empire preference. Not only through the Ottawa agreements but through other new major policies, the British Empire has perhaps undertaken the largest development of protectionism in history.

¹ See, for example, *Commercial Intelligence Journal* (Ottawa), June 10, 1933, p. 924.

This step is taken at a time when economic nationalism is rampant; it will tend to intensify this throughout the world. Preferences inaugurated within the Empire may provoke reprisals from outside the Empire. It has been repeatedly pointed out that the trade of the United Kingdom outside the

Empire is larger than within the Empire; gains within the Empire may be more than offset by losses outside the Empire. Certainly the results are not to be appraised by a few measurements of direct trade; the indirect effects may well turn out to be larger than the direct effects.

IV. EXPERIENCES DURING THE FIRST SEASON

The wheat preference arrangements became effective, as we have seen, on November 17, 1932; only the less important preference on flour was in effect throughout the crop year ending July 31, 1933. Hence the new system was fully in effect during only about two-thirds of the season. As will emerge in the discussion, however, the limitations of the plan have been clearly revealed in the way in which it has operated since mid-November 1932.

IMPORTS BY MAJOR SOURCES

Imports of wheat and flour into the United Kingdom by major sources of imports during the past twelve crop years (using adjusted data for imports from Canada and the United

States) are shown in Table 4. At first glance, this may seem to show that Empire preference was substantially effective. Imports from Canada and Australia were the largest of any year of the twelve but one; 75 per cent of Britain's wheat and flour imports were drawn from these two Empire countries, as compared with a previous record of 67 per cent in 1925-26 and a usual range of from 50 to 60 per cent. Imports from the United States were very light, and from miscellaneous countries only moderate. Imports from Argentina were smaller than in four of the five preceding years. As monthly data presented below will indicate, after November 1932 imports from the United States and Russia were very small, and imports from

TABLE 4.—GROSS IMPORTS OF WHEAT AND FLOUR INTO THE UNITED KINGDOM FROM PRINCIPAL COUNTRIES OF ORIGIN, AUGUST-JULY, 1921-22 TO 1932-33*

(Million bushels)								
Year August-July	Canada	United States	United States exports to United Kingdom ^a	Canada adjusted ^b	Australia	Argentina	Other countries	Total
1921-22.....	51.4	87.3	63.7	75.0	47.3	27.4	2.8	216.2
1922-23.....	68.6	79.5	37.2	110.9	14.0	34.6	16.4	213.1
1923-24.....	78.5	63.5	23.6	118.4	23.1	47.7	22.9	235.7
1924-25.....	72.8	63.7	50.1	86.4	33.0	30.1	30.7	230.3
1925-26.....	80.5	53.0	20.3	113.2	24.7	29.7	17.0	204.9
1926-27.....	76.4	76.6	47.4	105.6	26.0	32.3	16.7	228.0
1927-28.....	80.5	63.4	42.3	101.6	25.2	44.0	13.2	226.3
1928-29.....	81.2	43.4	21.4	103.2	26.1	55.0	9.1	214.8
1929-30.....	53.2	49.2	31.2	71.2	25.8	69.6	22.0	219.8
1930-31.....	64.0	36.7	24.3	76.4	39.8	32.2	64.9	237.6
1931-32.....	69.3	24.4	18.7	75.0	59.3	48.8	54.4	256.2
1932-33.....	114.0	2.6	2.0 ^c	114.6	56.0	34.2	20.0	226.8

* Computed from data reported in *Accounts Relating to Trade and Navigation of the United Kingdom*, except as noted in ^a below. Flour converted to equivalent bushels of wheat on the basis of a 70 per cent extraction. Data where not reported for the year indicated are computed from reported cumulative totals.

^a July-June data reported in *Monthly Summary of Foreign Commerce of the United States and Commerce and Navigation of the United States*.

^b Obtained by deducting United States July-June exports to the United Kingdom from the total reported imports

from Canada and the United States for August-July years. Especially for the earlier years, this adjustment must be regarded as rough.

^c Preliminary and partially estimated.

miscellaneous countries much reduced. Imports from Argentina, however, rose to normal volume in the second half of the year.

When, however, one takes into account conditions apart from Empire preference which obtained during the year, it becomes clear that Empire preference could not have been responsible for most of the increase in imports from Canada and most of the decrease in imports from the United States and Russia, and that the maintenance of imports from Argentina reflects the ineffectiveness of the 2s. duty in reserving the British market for Empire wheats. It is a striking fact that Canada ended the crop year with by far the largest stocks on record and Australia with relatively heavy stocks, while Argentina's were little above normal size.¹

The year 1932-33 was one in which Canada alone had supplies of exportable wheat far in excess of British import requirements, and Australia a record export surplus besides. Argentina, after three very moderate crops in succession, had no exceptional export surplus as in 1928 and 1929.² Russia, after two poor crops, could export little wheat. The Danube basin crops were exceptionally short. The United States, with a small crop but a record carryover, had a large surplus over domestic needs for food, feed, seed, and normal carryover; but various factors kept United States prices above export parity. On the whole, if Empire preference with a 2s. duty were ever to be effective in reserving the British market for Empire wheats, the season of 1932-33 would seem to have afforded conditions exceptionally favorable for this achievement.

Actually, therefore, Empire preference did not preserve for the Dominions the full import market of the United Kingdom. In fact, on closer analysis, it is difficult to ascribe to it a major influence upon the proportions of wheat imports drawn from Empire and ex-Empire sources. As an aid in this analysis, monthly data on gross imports of wheat and flour, from the five principal countries of origin and others, are shown in Table 5. The

principal indications of influence of the preference appear in the last three columns of the upper section of this table.

IMPORTS FROM THE UNITED STATES, RUSSIA, AND "OTHER COUNTRIES"

Wheat grain imports from the United States, which in August-November were very small both in relation to total British imports and in relation to total United States exports, practically disappeared after November. Total United States exports for the year were exceptionally light, and they fell off from November to May;³ but the declines in total United States exports were by no means as striking as the drop in British imports from the United States. In August-November 1932, net exports of wheat and flour from the United States were 18.9 million bushels and British imports from the United States 2.35 million, of which probably about 0.6 million was Canadian wheat shipped from United States ports; in December-March United States net exports were 10 million bushels, and British imports from the United States 0.17 million. Other factors, largely reflected in the relative position of the Liverpool and Chicago futures, were mainly responsible for the limited exports from the United States in the year as a whole, and for the small proportion of these that went to the United Kingdom before the wheat duty came into effect; but it is reasonable to assume that a little more United States wheat grain would have been imported by the United Kingdom in the absence of the 2s. duty. As we have already remarked, the United States had already lost, for other reasons, most of its flour market in the United Kingdom, except for Canadian wheat milled in bond for export; but the preferential duty on flour has operated further to reduce imports of United States flour to a mere trickle.

Russia's short crop was primarily responsible for very light wheat exports from the USSR in 1932-33; net exports for the year amounted to only 17 million bushels. Short crops in the Danube basin reduced competition of their wheats with Russian in Continental European markets. With Canadian wheat available in abundance, imports of

¹ See *WHEAT STUDIES*, September 1933, IX, 387.

² See also *ibid.*, December 1932, IX, 132.

³ See *ibid.*, September 1933, IX, 384.

Russian wheat in the United Kingdom would have been small in the absence of Empire preference. Total exports of Russian wheat were largest in September–November, and fell off heavily between November and February;

Empire preference, a little more Russian wheat would have entered British markets; and it is possible that the relatively heavy imports in October were due in part to anticipation of the coming into effect of the duty.

TABLE 5.—GROSS IMPORTS OF WHEAT GRAIN AND FLOUR AS WHEAT INTO THE UNITED KINGDOM, BY PRINCIPAL SOURCES, MONTHLY, 1932–33*

(Thousand bushels)

Month	Canada ^a	Australia	Argentina	United States ^a	Russia	Others ^b	Total
WHEAT GRAIN							
Aug.	7,147	6,445	2,069	466	—	1,073	17,200
Sept.	8,198	2,008	722	369	549	3,736	15,582
Oct.	11,205	1,141	914	603	3,062	2,708	19,633
Nov.	11,019	2,113	340	741	48	1,409	15,670
Dec.	11,755	1,937	163	4	301	144	14,304
Jan.	9,557	3,240	1,398	—	—	1,001	15,196
Feb.	7,505	2,241	3,877	9	1	586	14,219
Mar.	8,864	7,041	6,086	—	—	113	22,104
Apr.	6,004	9,263	4,041	—	—	113	19,421
May	7,568	6,244	4,710	0	—	259	18,781
June	7,225	4,093	5,040	0	—	136	16,494
July	6,835	4,667	3,819	—	—	452	15,773
Total	102,882	50,433	33,179	2,192	3,961	11,730	204,377
WHEAT FLOUR AS WHEAT ^c							
Aug.	951	647	78	29	...	99	1,804
Sept.	857	181	57	31	...	288	1,414
Oct.	943	225	50	63	...	212	1,493
Nov.	1,139	218	86	48	...	270	1,761
Dec.	1,244	503	74	58	...	270	2,149
Jan.	621	471	79	44	...	310	1,525
Feb.	731	362	69	28	...	357	1,547
Mar.	938	624	77	29	...	460	2,128
Apr.	703	525	77	24	...	376	1,705
May	1,106	607	91	26	...	521	2,351
June	997	628	118	11	...	491	2,245
July	969	653	114	36	...	712	2,484
Total	11,199	5,644	970	427	...	4,366 ^d	22,606

* Basic data from *Accounts Relating to Trade and Navigation of the United Kingdom*.

^a These are British official figures, unadjusted. The adjustment for 1932–33 would probably not be much over 600,000 bushels, which is approximately the difference between British data for exports of wheat grain from the United States and United States data (July–June) for exports to the United Kingdom.

^b No separate figures for imports from India are reported in the monthly accounts for 1932–33.

^c Flour converted to equivalent bushels of wheat on the basis of a 70 per cent extraction.

^d Of this total, 62.7 per cent was reported as imports from France.

but the decline was not so striking as the elimination of Russian grain exports in the United Kingdom after December.¹ It is reasonable to assume that, in the absence of

¹ Russia's wheat exports in February–July were so insignificant that the British embargo in April–June could have had no appreciable influence on British imports of Russian wheat. See reference cited in preceding footnote.

Imports from “other countries” also fell off in November and were considerably lighter in subsequent months. In part this reflects normal seasonal tendencies; but it may have been due in some measure to the effect of the duty in diverting to other markets some wheat that would otherwise have gone to Great Britain.

Altogether, the 2s. duty on wheat may have

kept out of the United Kingdom during 1932-33 between five and ten million bushels of wheat from the countries just discussed, and to some such extent enlarged the British market for Canadian and Australian wheat during the year.

IMPORTS FROM ARGENTINA

The important point, however, concerns importations of Argentine wheat. These declined, in accordance with usual seasonal tendencies, from August through December; but they rose in January-March and continued heavy through July, broadly in accord with the usual seasonal movement. If one compares the importations of Argentine wheat into the United Kingdom during February-July 1933 with imports during the same months in previous years, as shown in Table 6,

TABLE 6.—IMPORTANCE OF ARGENTINE WHEAT IN BRITISH IMPORTS OF WHEAT GRAIN, 1921-22 TO 1932-33*
(Million bushels)

Year	August-July		February-July		Percentage Argentine	
	Total	Argentine	Total	Argentine	Aug.-July	Feb.-July
1921-22..	174.3	26.8	92.9	23.9	15.4	25.7
1922-23..	180.1	33.9	84.3	19.8	18.8	23.5
1923-24..	206.9	46.6	112.0	30.4	22.5	27.1
1924-25..	202.4	29.1	91.3	13.8	14.4	15.1
1925-26..	179.7	28.0	83.5	18.6	15.6	22.3
1926-27..	198.2	30.2	106.7	28.4	15.2	26.6
1927-28..	199.9	41.7	103.3	33.2	20.9	32.1
1928-29..	192.5	53.0	97.9	34.9	27.5	35.6
1929-30..	190.1	67.0	83.4	18.9	35.2	22.7
1930-31..	207.2	39.6	94.5	24.6	14.8	26.0
1931-32..	229.5	47.1	105.2	32.0	20.5	30.4
1932-33..	204.2	33.2	106.8	27.6	16.3	25.8

* Computed from data reported in *Accounts Relating to Trade and Navigation of the United Kingdom*.

it will be agreed that imports of Argentine wheat have been maintained, under the system of Empire preference, almost "as usual." In only four years of the past twelve were imports of Argentine wheat significantly larger, in this portion of the year, in absolute quantity or in percentage of total imports. In 1924, Argentine supplies were large and those of Canada and Australia only moderate. In 1928 and 1929, Argentine supplies were exceptionally abundant.¹ In 1932, however, Argentina exported heavily to the United

Kingdom in spite of the fact that her exportable supplies were only moderate while those of Canada and Australia were very abundant, as was the case also in 1933. British wheat and flour imports from Argentina were about 4½ million bushels less in February-July 1933 than in the same period of 1932, under conditions broadly similar apart from Empire preference. To what extent, if at all, the existence of the duty was responsible for this slight decrease, it is impossible to say.

On the cash grain markets of Great Britain two facts were patent during the spring and summer. High-grade Argentine wheat, weighing 63 pounds or more per bushel, was purchasable in volume at prices at least approximating those of No. 1 Northern Manitoba; and indeed, most of the time, this Manitoba wheat was dearer than the Argentine wheat.² Also it has been possible for traders to purchase Argentine wheat c.i.f. port and sell it, delivered on futures, at a profit. In short, circumstances have brought it about that duty-paid Argentine wheat, quality considered, has been obtainable in the United Kingdom at prices directly competitive with or lower than

¹ See WHEAT STUDIES, December 1932, IX, 131-32.

² A fair comparison of Canadian with Argentine prices during 1933 is to be obtained with the use of quotations on wheat to London, using No. 1 Manitoba from Vancouver (with thirty days' sight bills) and Rosafé 63/64 pounds (with ninety days' sight bills). (The difference in the time of discount, at 3 per cent per annum, makes a slight but not significant bias.) In January 1933, the price of the Canadian wheat stood around 25s. per quarter, declining in February by a shilling or two, remaining fairly stable in March at around 24s., rising slowly in April to 26s., and in May to 27s., in June to 30s., with somewhat higher prices in July. The price of Rosafé in January was 2s. or 3s. per quarter below that of the Canadian wheat, dropping below 20s. in February, continuing around 20s. in March, rising to 21s. at the end of April, to 23s. in May, to 24s. in June, with irregularly higher quotations during July. Averages are not in place with the use of such figures, but it is clear that over the period the price of the Argentine wheat stood below that of the Canadian wheat by at least 2½s. to 3½s.; on some days the difference was over 4s. and occasionally touched 5s., which was the spread on June 30. The Argentine prices were without duty, which means that the actual spread was narrower by 2s. per quarter. The adjusted spread, however, was consistently wide enough to exclude the operation of preference to Canadian wheat and give the option of choice to Argentine wheat, except where wheat was purchased for the strengthening qualities of high-protein wheat.

duty-free Canadian wheat. Usually, average-grade 63-pound Argentine wheat cost duty-paid no more than No. 3 Manitoba, sometimes less. How is this to be explained? And is annual recurrence to be anticipated at the present rate of duty?

From the foregoing tables and discussion it is apparent that during the past season the importation of Argentine wheat was well sustained. In five of the previous ten years, less Argentine wheat was imported on a free market than during the first year under Empire preference. It might of course be assumed that in the absence of the duty Argentine wheat would have been imported in considerably larger amounts, as was the case in five of the ten years; but the difference could hardly have been more than four or five million bushels.

On analysis of price quotations, supplemented by direct inquiries into trade occurrences, the several factors may be brought out which have been responsible for continuation of importation of Argentine wheat.

1. The seasonal price curve favors import of Argentine wheat. The seasonal high price of Canadian wheat coincides with the seasonal low price of Argentine wheat; that is, Canadian wheat tends to be dear during the spring and early summer when Argentine wheat tends to be cheap, just as, conversely, Canadian wheat tends to be cheap in the autumn when Argentine wheat tends to be dear. This tilting of Canadian price upward and Argentine price downward during the spring and early summer may easily amount to several cents a bushel net. The influence of the seasonal factor is clearly revealed in Table 5; imports of wheat and flour from Canada declined from 47.5 million bushels during October-January to 33.4 million bushels during February-May, while imports of Argentine wheat rose from 3.1 million bushels during October-January to over 19.0 million bushels during February-May.

2. There is a certain price effect in Canada due to the operations of the provincial wheat pools which is lacking in Argentina; and in the past two or three years this has been reinforced by support from the Dominion government. In Canada there is not merely a

policy of restrained marketing; there are also the facilities for storage in elevators and in hedging stored wheat. In Argentina there is no grower control of marketing, storage facilities are inadequate,¹ and hedging on the Buenos Aires Exchange is the exception rather than the rule. Other things equal, these circumstances tend to harden Canadian wheat prices and to soften Argentine wheat prices.

3. The Winnipeg price stands under the influence of the Chicago price; that is, when the Chicago price is high relative to Liverpool, the Winnipeg price tends also to be firm. This has been made very clear in recent years. The futures price in Buenos Aires is not correspondingly influenced by Chicago, but tends rather to be influenced by Liverpool. In a sense it may be said that, whereas Winnipeg has the complexion of an exporters' market, Buenos Aires borrows from Liverpool the complexion of an importers' market. Export parity is more easily attained between Buenos Aires and Liverpool than between Winnipeg and Liverpool, with large exportable surpluses in both cases; the Winnipeg price on occasions rises above export parity with Liverpool in a way that rarely occurs in Buenos Aires.

During the spring and summer of 1933, Australian wheat was the broad basis of the Liverpool future. This price Argentine wheat met, and then sold below the Canadian price. Other things equal, it is to be expected that during August-January the price of Canadian wheat will determine the Liverpool future, whereas during February-July the Liverpool future will stand under the influence of the wheats of the Southern Hemisphere.

4. Under normal circumstances in foreign exchange, Argentine currency tends to be so related to sterling as to facilitate exports from Argentina, since Argentina has heavy obligations to meet in the United Kingdom. The Canadian dollar, on the other hand, stands more under the influence of the American dollar. Frequently the effect is to raise the price of the Canadian dollar relative to ster-

¹ Large schemes for building country and terminal elevators in Argentina have been under discussion for years, and apparently one is on the point of adoption, provided the financial obstacles in the way of carrying the program into effect can be overcome.

ling. Consequently, sterling tends to be a little more easily exchanged for pesos than for Canadian dollars.

5. Argentine wheat enjoys extraordinarily low freight rates to the United Kingdom. That is especially true if shipments out of the Black Sea are light. There has been no effective conference regulation of ocean freight rates since the Antwerp-River Plate Conference broke down in 1931. The established practice of carrying wheat in parcels on liners from North Atlantic ports has practically driven the tramp out of the Canadian wheat trade. During recent years, tramp rates from South America to Europe have declined disproportionately. Having been driven out of the Canadian wheat trade, the tramps have so reduced the rate from Argentina that Argentine wheat enjoys a relative advantage in freight costs.

In consequence of these several factors, the duty does not serve as a significant barrier against importation of Argentine wheat into Great Britain, and Argentine wheat tends to "absorb" the duty; that is, the spread between Liverpool and Buenos Aires prices tends to be widened to some such extent, through relative decline in the Argentine price. The duty of 2s. per quarter is about 6 cents per bushel at par; but with sterling off gold it has amounted to around 4 gold cents per bushel. From the standpoint of the Argentine producer and of the British importer, 4 cents per bushel is no inconsiderable duty when the Liverpool price is below 60 cents gold; but from the standpoint of wheat price range and costs of transfer, 4 to 6 cents a bushel is not a large figure. Experienced traders foresaw not merely the possibility, but the probability, that Argentine wheat would enter the United Kingdom duty-paid, if the spread that had to be surmounted was no more than 4 to 6 cents.

From the standpoint of the absorption of such a sum as 4 to 6 cents, through the operation of the factors mentioned above, the circumstances in the wheat trade cannot be regarded as abnormal during the season under review. Quite to the contrary, it seems safe to make the prediction that with abundant wheat crops in Argentina, duty-paid Argentine wheat will enter the United Kingdom in

still larger volume, even with abundant wheat supplies in Canada. For a third of the wheat in the national mill mix, Canadian wheat must be had even if at a sharp premium. But for a third of the mix, Argentine wheat is just as good as Canadian (indeed, it is even preferred by some millers), and price is the determining factor. In a sense, Canada suffers by having only hard spring wheat to offer, and this gives Argentina her opportunity.

DECISIONS AFFECTING EXPORT ROUTES OF CANADIAN WHEAT

Among the experiences of the first year of Empire preference, one concerns the route of shipment of Canadian wheat to the United Kingdom. When the arrangement was concluded at the Ottawa Conference for placing a duty on non-Empire wheat imported into Great Britain, no reference was made to the question of route of shipment. It was merely designed, in respect of North America, that all Canadian wheat should enter duty-free while all ex-Empire ("foreign") wheat, including that of the United States, should be subject to the 2s. duty. Under the general rule of tariffs, the duty would be based on the identity of the material, not on the route of shipment to the importing country. In applying the Ottawa Agreements Act,¹ however, the British customs authorities ruled that, in order to secure admission duty-free, Empire wheat must be shown to have been consigned from a point within the Empire direct to the United Kingdom. This requirement has important bearings on certain phases of the Canadian grain export trade.

Since the beginning of the Canadian wheat export trade it has been the custom not only to export part of the crop straight through the United States and out of United States Atlantic ports, but also to store Canadian wheat in elevators lying east on Lake Huron and Lake Erie, grain brought down on lake boats before the close of lake navigation. These elevators included those on the Georgian Bay, on the north shore of Lake Erie and of Lake Ontario, and on the south shore of Lake Erie, especially at Buffalo. It has also

¹ Sect. 2 of this Act followed the phraseology of the Import Duties Act, 1932, Sect. 4.

become the custom to store Canadian grain in boats and barges at Buffalo. Part of the wheat thus stored at eastern ports would be exported during the winter via St. John and Halifax, or via Portland, Boston, New York, Philadelphia, Baltimore, and Norfolk. It is available for quick shipment to catch liners. The grain stored in Buffalo is stored in bond, for preservation of identity. When exported through American North Atlantic ports, it is shipped by rail in bond and is loaded on vessels bound for Europe under certification as Canadian wheat. There appears to be no possibility of loss of identity, substitution, or adulteration. The wheat thus lying in storage in bond in the United States is not on consignment; it may be the property of Canadian or American grain merchants. Moreover, grain hauled from Fort William and Port Arthur to Buffalo may be carried either by Canadian or American boats; but grain carried from Fort William and Port Arthur to Canadian ports may be carried only by Canadian boats.

Under this long-established practice—which proved economical to shippers and dealers—American lake boats, elevators, railways, ocean ports, and ocean liners of all flags shared in the handling of Canadian export wheat. Eastern Canadian interests have long wished to secure this business all for themselves. The adoption of Empire preference appeared to afford an opportunity to bring this about. Accordingly, though the question apparently did not enter into the discussions at the Ottawa Conference, it appears that these interests sought and obtained a ruling, on existing regulations, that would operate in this direction, though it would not prevent through shipments from Canada on direct consignment via the United States.¹

It is not contended that the proposed service would be cheaper, quicker, or in any way better; it is merely desired that the service be made in effect compulsorily all-Canadian. This implies not merely that Canadian wheat growers have a preference in the arrangement with Great Britain, but also that Canadian lake boats, Canadian elevators, Canadian railways, and Canadian ports be accorded a preference. It is unlikely that the Canadian elevators are now in position to carry the total traffic in

the event of a large crop;² and the two Canadian ports open during the winter, Halifax and St. John, are not now in position to offer shipping services comparable with those available in New York, Philadelphia, and Baltimore.

Naturally the above-mentioned ruling occasioned a great deal of controversy and negotiation during the first season, and the subject is not yet closed. It was not until early in June that American exporters succeeded in obtaining satisfactory information concerning the documents and circumstances essential to prove through consignment. These are set forth in a memorandum published, for example, in the *Northwestern Miller* of June 28, 1933, page 695. Efforts to get the ruling modified continue.

Meanwhile, it is pertinent to observe that relevant statistics for 1932-33 reflect somewhat less influence of the routing on shipments through the United States than one might infer from some published discussions of the subject. The proportion of Canadian wheat exports overseas that were shipped through United States ports had been declining for several years, and the volume of shipments by this route was much smaller in the three crop years ending July 1932 than in the preceding seven. This is shown by the following tabulation based on official figures:³

¹ In order to obtain free admission as Canadian wheat, it is necessary to have presented to the British government evidence on three points: an order from a buyer or importer in the United Kingdom for a supply of Canadian wheat; an invoice from the seller to the British buyer; and documents tracing the transit across the United States. Despite persistent efforts to have the procedures fully clarified in respect to every possible contingency, shipping interests do not regard the regulations as fully definitive. We take it for granted, however, that American participation will be effectively ruled out, and exports of Canadian wheat passing through the United States "on orders" will not enjoy preference if admitted into the United Kingdom.

² The adequacy of elevator and shipping facilities at Halifax and St. John is subject to dispute. Broomhall published a communication from the High Commissioner in London, giving the storage capacity of elevators at Halifax and St. John as 2,200,000 bushels and 1,500,000 bushels respectively, with an estimated handling capacity of 1,000,000 bushels per week through each port. (See *Corn Trade News*, November 23, 1932.)

³ See WHEAT STUDIES, December 1932, IX, 121.

Year Aug.-July	Percent- age of total	Million bushels	Year Aug.-July	Percent- age of total	Million bushels
1921-22 ...	63	109.7	1927-28..	47	151.5
1922-23 ...	57	150.8	1928-29..	43	172.2
1923-24 ...	51	164.7	1929-30..	43	77.2
1924-25 ...	52	99.1	1930-31..	38	96.3
1925-26 ...	51	161.3	1931-32..	26	52.3
1926-27 ...	53	285.2	1932-33..	22	57.2

But in 1932-33 more Canadian wheat was exported by this route than in 1931-32, though the percentage of total exports was lower than in any recent year.

The wheat movement specifically affected by the ruling is that involving storage of wheat in bond in the United States and subsequent shipment. The effect on this movement is well indicated, though not precisely measured, by the annual reduction in stocks of Canadian wheat in the United States between the maximum in December or January and the minimum about the end of the following April. The figures are as follows, in million bushels and as percentages of the total Canadian overseas exports of wheat:

Crop year	Stocks		Indicated shipments from stocks	
	Maximum (million bushels)	April minimum (million bushels)	(million bushels)	(percentage of total exports)
1925-26.....	28.6	3.3	25.3	7.8
1926-27.....	33.6	4.7	28.9	9.9
1927-28.....	37.6	10.8	26.8	8.0
1928-29.....	49.2	20.3	28.9	7.1
1929-30.....	40.3	19.0	21.3	11.4
1930-31.....	33.8	3.9	29.9	11.6
1931-32.....	24.5	4.6	19.9	9.6
1932-33.....	16.6	2.5	14.1	5.3

The exports in 1932-33 were large relative to those in the previous year, but smaller than in most other recent years. As a percentage of the total exports they were only slightly larger than the average of the past nine years.

Shipments through St. John and Halifax, which occur chiefly in the months of January-April, appear not to have been notably affected, as may be seen from the following tabulation of total exports through those ports and percentages of total Canadian wheat exports by crop years:

Crop year	Million bushels	Per- centage
1924-25	5.6	2.9
1925-26	11.8	3.6
1926-27	16.7	5.7
1927-28	9.0	2.7
1928-29	11.8	2.9
1929-30	4.3	2.3
1930-31	9.3	3.6
1931-32	2.3	1.1
1932-33	8.6	3.3
Average	8.8	3.1

In the light of experience in the first year of operation it may be judged that the substantial prohibition of export to the United Kingdom of Canadian wheat stored in bond in the United States will curtail but by no means destroy the movement of Canadian wheat to the United States for storage and subsequent shipment, since movement through these channels to non-Empire countries is unaffected. The eastbound winter movement of Canadian grain to the United Kingdom will perhaps be curtailed somewhat. To the extent that the movement is shifted from routing through United States ports to routing through Canadian ports, Vancouver will probably benefit more than Canadian Atlantic ports.

The diversion of traffic will involve loss of business to American railroads running from Buffalo to Atlantic ports. The traffic will be transferred in some part to the route from the eastern Great Lakes to St. John and Halifax, but probably in the main the shift will involve substitution of westward movement from the prairies through Vancouver for eastward movement from the prairies through Buffalo. To the extent that the shift takes this form, the revenues of Canadian railways will be substantially unaffected and ocean shipping out of Vancouver will gain what is lost to Great Lakes shipping and American railroads.

Some increase in average cost of shipping Canadian wheat to the United Kingdom during the winter months may be expected in consequence of the ruling barring wheat that has gone into storage in the United States from Empire status. The amount of the increase will depend on the readiness with which shipping can be diverted to the new

routes. With present dull trade and relative surplus of ocean transport facilities, the diversion of trade to abnormal channels is easier and involves less added cost than it will with more active trade and greater demand for tonnage. The tendency toward increased cost of shipment under the new ruling, however, cannot be doubted.

The added costs will represent primarily additional payments for ocean transport and as such will go to shipping concerns. The

burden of the added cost might fall either on the Canadian producer or the British consumer, or on both, depending on circumstances. Inasmuch, however, as the Canadian price will depend on the market for surplus Canadian wheat outside the Empire, and the cost of shipping to those markets will be affected little if at all, the most reasonable assumption seems to be that the added cost will be borne chiefly at least by the British consumer.

V. CONCLUDING OBSERVATIONS

Empire preference on flour has been in effect since March 1, 1932, when the 10 per cent ad valorem duty was applied to ex-Empire flour, and on wheat from November 17, 1932, when the duty of 2s. per quarter was applied to ex-Empire wheats. The adoption of preferential duties on wheat and flour, instead of import quotas, was apparently due mainly to two facts: the vigorous opposition to the quota plan from British grain and milling interests, and the Canadian Prime Minister's urgent demand for the tariff preference. Both duties are low, as protective duties go. The traditional aversion of the British to any "tax on bread" was doubtless an important influence toward keeping these duties low; but it did not prevent the application of a much higher levy on flour, under the Wheat Act, 1932, to finance a subsidy to British wheat growers. Even at recent levels of wheat prices, the duty on wheat appears low in the light of the range of prices for different wheats in British markets; and if and as the level of wheat prices should rise well above the recent extremely low levels, the 2s. per quarter would have diminished significance.

Experience during the first season of Empire preference on wheat and flour, together with reasoning on known facts, supports the inference that the preferential duties adopted will by no means reserve the British markets for Empire wheats, and will not radically increase the share of Canadian and Australian wheats taken by the United Kingdom. Other conditions operating in 1932-33 were responsible for most of the recorded increase in British takings of Dominion wheats. Argen-

tine wheat seems likely to be imported into Great Britain, present duty paid, in much the same volume and proportions as in the absence of the duty. Among numerous factors responsible for this, the divergent seasonal course of prices in Canada and Argentina is the most important. The effect of the duty, so long as it is no larger than at present, will be felt chiefly in a lowered export price of Argentine wheat, or increased import price, or both. In years when Russia is able to export substantial quantities of wheat, favorable shipping costs and perhaps also economies of direct acquisition of sterling exchange are likely to encourage liberal Russian exports to Great Britain over the tariff barrier.

The United Kingdom has always received certain import wheats which in a sense were properly defined as "in distress." Illustrations are the soft white wheat of eastern Germany and soft red wheat from France. These countries have always sought to export superfluous amounts of these wheats and to import hard wheats in their stead without payment of duty or on payment of a reduced duty. The United Kingdom has always taken certain amounts of these wheats and used them, like domestic wheats, as filler wheats to blend with imported hard wheats. We take it these wheats will continue to enter duty-paid. The United Kingdom has been the best market for these wheats; if they cannot be sold there, disposition elsewhere becomes a problem. If unexported, they depress the domestic price and the governments may be forced to market them as feed. Under these circumstances, it seems likely that some importation of these

wheats will continue, present duty paid, during the autumn months. Whenever Germany or France feel themselves forced to export soft wheat in order to import hard wheat, it will probably be found cheaper and easier to send it to England and pay the import duties rather than peddle it around in other less desirable markets. In the present year, French wheat and flour are moving to Great Britain under the stimulus of a substantial export bounty.

In London, early in August 1933, it was already clear that duty-paid Continental export wheat would enter England in volume this autumn. If the Russian crop is anything like the forecast of the Soviet government, duty-paid Russian wheat will also enter in significant amounts. Whenever a country has a motive for dumping wheat, it will hardly be deterred by the existing duty. It is true that under existing laws the British government has anti-dumping powers; but these have been rarely if ever invoked. The Ottawa Agreements contain provisions designed to reinforce these powers. Thus Article 21 of the Canada Agreement reads:

This Agreement is made on the express condition that, if either Government is satisfied that any preferences hereby granted in respect of any particular class of commodities are likely to be frustrated in whole or in part by reason of the creation or maintenance directly or indirectly of prices for such class of commodities through State action on the part of any foreign country, that Government hereby declares that it will exercise the powers which it now has or will hereafter take to prohibit the entry from such foreign country directly or indirectly of such commodities into its country for such time as may be necessary to make effective and to maintain the preferences hereby granted by it.

There is little ground for expecting effective action under such provisions. Even under normal conditions they are difficult to apply; and dumping in various guises is so prevalent in the present abnormal world that anti-dumping action would lead to endless complications. It is significant that no action has yet been taken under the extreme provocation afforded by importation of French wheat at very low prices because of a high export bounty.

The case of the United States is different. Largely for other reasons, United States wheat and flour have lost their markets in the United Kingdom; but if and when these other conditions should be modified, the existing duty will continue an appreciable barrier to imports from the United States, except to the extent that shortage of Australian wheat might induce importation of Pacific wheat. After the experience of the past few years, it is difficult to prophesy when the holding of wheat in the United States will be so weak as to induce Americans to absorb the British duty in order to sell wheat within Great Britain. The present unexported exportable surplus has accumulated in the United States partly on account of private holding against low prices and partly on account of government-sponsored price-raising measures during a portion of the time. Even when the Grain Stabilization Corporation was stimulating exports partly through absorbing losses, comparatively little wheat was exported to Great Britain. Measures are just being taken (October 1933), under the new Agricultural Adjustment Act, to subsidize exports from the Pacific Northwest surplus area in the present season. It remains to be seen whether, under the scheme adopted, efforts will be made thus to move wheat from the Pacific Northwest to the United Kingdom, and whether, if so, it will be allowed entrance without other obstacle than is presented by the import duty.

The several influences which we have brought forward to explain the importation of duty-paid ex-Empire wheat in 1932-33 were not peculiar to that season, but are inherent in the wheat import trade of the United Kingdom, and will persist to greater or lesser extent in future seasons. If Empire wheat is really to be given a fully effective preference in the United Kingdom, a much higher duty will have to be imposed.

It is, of course, to be kept in mind that wheat is only one item in a long program of Empire marketing. Viewed as a whole, the bilateral agreement with Argentina would seem to facilitate the admission of duty-paid wheat from that country. Whether a new agreement with Russia will, if made, have

this effect, remains to be seen. Quite clearly, marketing agreements between the United Kingdom and debtor foreign countries will be likely to have the incidental effect of moderating the duty on wheat from those countries. A marketing agreement is presumably not contemplated with the single country creditor to the United Kingdom, viz., the United States. In any event, the types and qualities of American export wheats are such, in contrast with others available to the United Kingdom, as to make the duty of 2s. a quarter higher in the estimation of British mills than when applied to wheats of Argentina. In addition, the influence of the Chicago future may be counted on to augment the effect of the duty in restraining United States exports to the United Kingdom.

In short, a review of the pertinent circumstances in the international marketing of wheat supports the interpretation of the first season of Empire preference to the effect that, in what may be called usual and normal crop years, the proportion of ex-Empire wheat entering into the annual supply of the United Kingdom will not be significantly lowered, except for wheat from the United States. Except with the occurrence of extraordinary gluts of wheat in Australia and Canada, or of exceptional shortage in Argentina, it will be found that with a duty of 2s. per quarter Argentine wheat will tend to hold its position in the United Kingdom. When exportable wheats are freely available to the Soviet government, Russian wheat will enter duty-paid in substantial quantities. The incidental exports into the United Kingdom, such as white wheat from Baltic Germany and soft red wheat and flour from France, will hardly find the duty formidable. Probably the duty will keep out or greatly restrain imports of American wheat and flour other than that from the Pacific Northwest, supporting the relatively higher position of the Chicago price. Canada has indeed been given a preference over the

United States in respect of hard wheat and Australia has been given a preference over the United States in respect of soft wheat; but they have not been given effective preference over Argentina and Russia. If such preference is really to be claimed by the Dominions and granted by the United Kingdom, a much higher rate of duty will need to be established.

During the session of the recent World Economic Conference, the delegates from the different parts of the British Empire indulged in many discussions of the workings of Empire preference, and the subject has also arisen in the several Parliaments. The Dominions find that they have received less increase in exports to the United Kingdom than they had expected; the United Kingdom finds that less goods have been sent to the Dominions than expected; and farmers in the United Kingdom complain (not, however, with respect to wheat) that they are losing their home markets. Daily the Canadian and Australian delegates noted the imports into the United Kingdom of Argentine wheat, at duty-paid prices lower than theirs. Polite threats have been made that quotas of animal products must be made more "equitable"; but we have heard no demand for increase in the duty on foreign wheat.

In association with the meeting of the delegates of the British Commonwealth of Nations following the adjournment of the World Economic Conference, a great deal of praise was bestowed on the spirit and objectives of the Ottawa Agreements, on the thesis of a closely knit Empire. But there was also much dispute over the specific agreements on commodities. In the issue of the *London Times* of July 30, David Lloyd George (a Liberal Free Trader who has become a tactical protectionist) remarked that "Ottawa produced many mistakes and there is going to be a very great row about it." Whether "the row" will include wheat, remains to be seen.

This issue was written by Alonzo E. Taylor with the advice of Joseph S. Davis and Holbrook Working

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