WHEAT STUDIES

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ECONOMIC NATIONALISM IN EUROPE AS APPLIED TO WHEAT

THE business depression has provoked difficulties for state budgets and international accounts as well as for private enterprises. At the low price level, debtor countries find the values of their exports too small; despite low prices, creditor countries find the values of their imports too large. In order to influence their international accounts, both debtor and creditor countries endeavor to increase exports and reduce imports by direct governmental action. Quite generally the result is to promote self-containment. In Europe, in particular, the programs of self-containment are becoming state policies of ambitious extent. "Economic nationalism" is the political term applied in Europe. The movement is fostered by distress of producer classes. In particular, agriculturists in European countries seek preferential positions. It is sought to raise more food at home and to import less. The program has been advanced for bread grains especially. Western Europe aims to raise more wheat. Central Europe seeks preference in the wheat markets of Western Europe. The Dominions of the British Commonwealth seek preference in the wheat markets of Great Britain. Great Britain, Holland, Belgium, and France extend preferences to their colonies for feeding stuffs. In order to effectuate quotas and preferences, intricate internal regulations and extensive interstate barters become necessary. Russia, Argentina, and the United States stand outside the charmed circle. Of the exporting countries, the United States alone must sell export wheat at competitive prices on open markets. This country possesses no bargaining tariff. If the countries of Europe develop these programs significantly, the wheat export problem of the United States will become intensified.

STANFORD UNIVERSITY, CALIFORNIA

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The central feature of the series is a periodic analysis of the world wheat situation, with special reference to the outlook for supplies, requirements, trade, and prices. Each volume includes a comprehensive review of the preceding crop year, and three surveys of current developments at intervals of about four months. These issues contain a careful selection of relevant statistical material, presented in detail in appendix tables for reference purposes, and in summary form in text tables and charts.

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ECONOMIC NATIONALISM IN EUROPE AS APPLIED TO WHEAT

The profound depression in agriculture, industry, and trade has tended to accentuate nationalistic tendencies that were already in evidence. The newer developments, in their relation to wheat, have already received some consideration in our reviews of the world wheat situation. Here we undertake to present, as it were, an inside view of the movement.

The countries of Europe, without exception, find themselves involved in several or all of six pressing difficulties. These are inability to balance the state budget, disequilibrium in the international account, instability of currency and banking, agrarian distress, unemployment of urban workers, and political instability. The transfer problems of reparations and war debts, the excessive borrowing of the Continent during the past decade, the reversal of the normal relations between short-term credits and long-term investments, excessive rates of interest, and the depression of trade, associated with extreme decline in the price level, stand out prominently.

Hard pressed by these complex difficulties, European countries are considering and already in process of evolving programs which merit the term commonly applied in Europe—economic nationalism. These are being supplemented by preferential measures within Europe and with overseas countries politically tied to Europe. The national objectives are clear; the methods are in hand; only the extent, course, and rapidity of future developments remain to be seen.

Such policies, of course, are by no means peculiar to Europe; comparably provoked manifestations are apparent in such widely different countries as Egypt, the Union of South Africa, Brazil, Mexico, and Australia. They are, however, undergoing marked development in Europe, which is the greatest wheat-importing area.

These policies, moreover, are being applied with special vigor to wheat. They are leading in the direction of expansion of wheat production in Europe, and of curtailment of Europe's wheat imports, especially from overseas countries having no political ties with European countries. They entail extensive regulation of the milling industry, deterioration of quality and increase in price of wheat products, reduced wheat consumption, and higher cost of poorer living. In other words, in a period characterized by an extraordinary world wheat surplus, measures appropriate to a period of wheat scarcity are being increasingly applied.

Such national policies, and the measures taken thereunder, are gravely complicating the solution of the world wheat problem, which calls for readjustment of supply and demand through expansion of consumption, contraction of production, or both. They have outstanding significance for America's policy with respect to agriculture, international trade, and international debts and credits. The importance of the subject, the indeterminate nature of the developments, and the unforeseeable duration of the movement combine to render timely a provisional examination of economic nationalism in Europe as applied to wheat.

Europe's Pressing Difficulties

The springs of this development merit a brief discussion. First, the budgets of most of the European countries are more or less out of balance. Revenues have declined, especially income taxes. Expenditures have not declined but have tended to increase. Restriction of outlays for unemployment and other social relief encounters intense resistance. So also does increase of direct taxation. The plain truth is that in most European countries, for the time being, a balancing of the state budget is not feasible in the economic circumstances of the country. This is as true in the countries which have wiped out or devalued their internal war debts as in those countries in which these debts constitute a major public burden.

Disequilibrium of the international account applies to practically all countries.

Broadly speaking, the debtor countries of Europe ought, under normal circumstances, to export more goods and services than they import; the creditor countries ought to import more than they export. Allowing for tourist traffic, emigrant remittances, and minor services, the extent of positive or negative balance of merchandise trade, respectively, ought to be closely related to the extent of the net debtor or creditor positions. At present this is not the case. The relations between short-term credits and long-term investments are abnormal; excessive volumes of short-term indebtedness are adding greatly to current lack of balance in the international accounts. Gold does not now move between European countries in settlement of merchandise trade balances; indeed, trade balances are not being settled by transfer of gold exchange, by movement of securities, or by refunding operations. Transfer problems have seldom been so difficult as at present.

When an international account cannot be settled through bills of exchange, credits, or movements of gold, the primary merchandise transactions come under review. When the processes of monetary exchange weaken, barter reappears. The net result is that in almost every state the relation between import and export of goods, which is unbalanced for that state, does not find a corrective in the operations of trade, but tends to persist. Since the international accounts are not brought into normal balance by movement of gold or of the "invisible" items, the governments feel themselves driven to artificial manipulation of the visible items of trade. That is to say, the governments endeavor to stimulate exports of goods and restrict imports of goods. When this is done in debtor countries, the effect sought is enlargement of the positive balance of merchandise trade; in creditor countries, the effect sought is reduction of the negative balance of merchandise trade. When, for a commodity like wheat, increase of export is sought in net-exporting countries and decrease of import is sought in net-importing countries, a large problem develops.

The countries of Europe which are outstanding creditor states on private account (long-term) are Great Britain, France, Holland, and Switzerland. The Scandinavian countries have both imported and exported capital, but their net position is not clear, especially on account of the ramifications of the Swedish match industry; probably the area as a unit is a creditor region, but its exact position has relatively little importance. Spain and Portugal are probably debtor countries, despite scattered investments in the Latin-American countries, even when allowance is made for remittances from their emigrants abroad. Italy is presumably a debtor country, after allowance is made for large remittances from Italians resident in other countries. Germany and all of the states of Central Europe are debtor countries (on long-term), though Czecho-Slovakia may be approaching a net creditor status on long-term private account.

There is an enormous difference between the position of Continental Europe ex-Russia before the World War and at the present time. Before the war, Great Britain was the leading creditor country of Europe, but the creditor positions of several Continental countries were heavy in proportion to their import requirements. Since the war, the creditor position of Great Britain has become relatively much more outstanding; Germany, Austria, and Hungary have changed from creditor to debtor status. This transition has not been accompanied by corresponding changes in the industries of Continental Europe or in the wants of her consuming units. Europe must pay for her excess of imports of goods and interest on her foreign debt with tourist expenditures, emigrant remittances, earnings on foreign investments, and income from banking, shipping, and insurance services to foreigners. Whenever these invisible credits are sharply reduced, which is the case with all at the present time, Europe's purchasing power for goods is directly curtailed. In so far as goods can be purchased on credit, the current position is eased; but at present this opportunity is severely limited.

In most countries of Europe there is, largely in consequence of the foregoing difficulties, insecurity of currency and overstrain of the banking structure. Hoarding of gold and flight of capital must be con-

tinually guarded against, the gold reserves unceasingly safeguarded. Under these circumstances the financing of export trade becomes difficult, costly, and hazardous; the result is to influence the international account unfavorably and to prompt efforts at control of imports.

Agricultural distress is universal in Europe. Low prices and high costs coexist. One of the major items in high cost has been the oppressive rate of interest since the war, especially in Germany and in the countries of Central Europe. Everywhere, when agricultural distress is combated, it is found easier to undertake elevation of price than reduction of costs.

Urban unemployment has risen to extraordinary proportions. This provokes more or less inconsistent and paradoxical reactions. If agriculture, mining, and lumbering could be stimulated, it is urged, unemployed urban workers would find employment in the country. A prosperous agriculture would mean a larger home market for manufactures. It is ingeniously suggested that farm prices can be substantially raised without the city prices for food being significantly elevated. In a rather curious manner, despite unemployment and the imperative necessity of reducing costs of articles designed for export, policies are adopted in European countries which tend to increase the cost of living. Eventually, the higher cost of food will raise the cost of living (or retard its decline), the higher index number of the cost of living will be used to raise wage scales, increase in the wage scale will elevate the prices of goods designed for export, and increase in the export price level will tend to lower the volume of export trade. Sooner or later, therefore, the industrial classes—bankers, entrepreneurs, and workers—will become politically antagonistic to any program that brings higher foodstuff prices; but the lag in reaction may be long.

Finally, many nations of Europe have been beset by political instability of exceptional degree. A special feature of this has been what is regarded as the menace of Communism. The agricultural classes have been regarded as a bulwark against Communism, and the desire to maintain them as such has added force to agrarian protectionism. Operating in the same direction, in various countries, is the old notion of maintaining food production as a resource in case of war.

Out of these pressing circumstances, in practically every European country during the past two or three years, the impulse toward increased self-containment has gained great headway. This is a large phase of economic nationalism. To buy as little from the outside world as possible is regarded as a casting-off of dependence. Internally appraised, the program of reduction of imports and stimulation of exports is a masked reversion to eighteenth-century mercantilism. Further, the movement for economic nationalism has developed trade preferentials as a companion.

When the cabinet of a country approaches the practical question of restricting imports to improve the international account, limitations appear, varying from state to state. Everywhere it is sought to check importation of luxuries and nonessentials. But essentials, especially raw materials not produced in the country, must be admitted, practically without restraint. To restrict importation of cotton, rubber, copper, and tin, for example, would injure domestic consumers and hamper the "improvement trade." As the cabinet in each country goes down the list of goods imported, the items selected for limitation simmer down to a few. Broadly speaking, it is feasible to contract imports of those goods only which are produced within the country in relatively large amounts and of which production is open to expansion. In short, the program of self-containment is likely in each country to be reduced to an agricultural policy, a program of producing at home a larger proportion of staple foodstuffs and importing a correspondingly smaller amount.

Of all the branches of agriculture, the growing of cereals lends itself best to the program. At the present time, therefore, the most conspicuous instance of the program of self-containment in Europe is the movement to raise more grain and import less from abroad. And among the grains the project of self-containment is peculiarly applicable to the bread grains, especially wheat.

The Agricultural System of Europe

Before the World War, Europe (ex-Russia) had a highly developed agricultural technique and a broadly defined agrarian program, naturally with variations from country to country. Stress was laid by experts upon the raising of bread grains and brewing barley; sugar was a highly developed export crop; in the interests of fertility of the soil, animal husbandry was preferred to import of animal products. Aside from specialties such as vineyards, the agriculture of Europe was founded upon the bread-grain field, the sugar-beet field, and the feeding yard. Even before the war, imports of oil seeds were supplementing the imports of feed grains from Russia and overseas.

The long war disorganized agriculture, disrupted the established crop rotations, reduced the herds of domesticated animals, and led to movements for parcellation of land. Recovery was retarded by many factors, chief of which, perhaps, was the high cost of credit, and also, in certain countries, post-war policies of breaking up large estates. Broadly speaking, with respect both to crops and to livestock, the agriculture of Europe may now be said to be restored, in many cases to above the pre-war level.

Although the changes in national boundaries have effected some translocations, all in all European agriculture today is much like it was in 1914. Farming is largely in the hands of landlords and peasants, who regard themselves and their descendants as fixtures in agriculture, as were their forebears. In some countries, such as Roumania, the parcellation of estates has greatly increased the proportion of small peasant farms. The outstanding difference is that landlords and peasants alike have been less prosperous since the war than before.

Generally speaking, there is little room for expansion of arable land in Europe. There is, however, opportunity for considerable shifts of acreage among the various uses. So far as pre-war and post-war statistics can be regarded as comparable, they reveal numerous changes. Cereal acreage has contracted a good deal in France, and moderately in Germany and Czecho-Slovakia, but it has increased in Central Europe. Except in Roumania, the acreage in oats, and in the coarse grains as a whole, has generally declined. Bread-grain acreage has increased in some countries, declined in others; it is well below pre-war levels in France, Roumania, and in some smaller countries. Acreage devoted to rye has generally declined; only in Poland is it substantially above the pre-war average, though in some other countries it is slightly higher. In most countries, wheat acreage has not only increased but constitutes a larger proportion of bread-grain acreage than before the war.

Such changes, however, and the variations from year to year, do not obscure the broad fact that again, as before the war, the bread-grain field, the sugar-beet field, and the feeding yard are the outstanding features of European agriculture. Europe ex-Russia remains a heavy net importer of wheat, a substantial net importer of corn, and a moderate net importer of barley, while it is largely self-contained as to rye and oats. The heaviest shortage is in protein, with fat next and carbohydrate least. Production and import of feed grains are supplemented by heavier imports of oil seeds, which furnish edible and industrial fat as well as protein concentrates for domesticated animals.

For the purpose of the present discussion Europe may be divided into three zones running north and south. Eastern Europe is Soviet Russia in Europe; Central Europe extends from Finland to Greece inclusive, comprising all countries east of Germany, Switzerland, and Italy; Western Europe includes Scandinavia, Italy, and all countries bordering on the Atlantic Ocean. The population of Eastern Europe is about 120 million; that of Central Europe is about 116 million; that of Western Europe is about 260 million. In agricultural products regarded as a unit, and in cereals in particular, Eastern Europe is a surplus region; Central Europe is also a surplus region; Western Europe is a deficit region. Manufacture is poorly developed in Eastern Europe, moderately but irregularly developed in Central Europe, and highly developed in Western Europe. There are, of course, local

deficit areas in Eastern and Central Europe and local surplus areas in Western Europe; but this circumstance does not disturb the general argument.

Eastern Europe and Central Europe are debtor regions and ought to show positive balances of merchandise trade; Western Europe is a creditor region and ought to show a heavy negative balance of merchandise trade. There are, of course, debtor regions in Western Europe, particularly Germany; but this is an anomalous situation growing out of the war and does not affect the general argument; indeed, it reinforces the lesson to be drawn later. The natural result of the geographical situation before the war was to balance the crop surpluses of the debtor regions of Eastern and Central Europe against the crop deficits of the creditor region of Western Europe. This is again the natural impulse of Europe, despite the abnormalities in boundaries, financial resources, and trade relations resulting from the war.

The outstanding change from before the war lies in the smaller proportion of cereals obtained by Western Europe and northern Central Europe from Russia. Since the war, Europe has drawn her cereal imports much more heavily from overseas exporting countries, chiefly North America, Argentina, and Australia. Even in the past two years, Russia's cereal exports, mainly to Europe, have not approached the average annual exports in the five years before the war. The Soviet ambition is to restore Russia's pre-war eminence as a grain exporter. How far, or how soon, that ambition may be realized, none can safely predict. It seems fair to assume that in the near future Russia's cereal exports will continue important, at least in years of good yields, but that they will not average as large as before the war. The need of funds to meet foreign commitments leads to special efforts to expand agricultural exports, even at the expense of domestic consumption. Russia has evinced readiness to direct her orders for import goods to countries which will purchase her exports.

Neither the import requirements nor the export surpluses are to be directly measured from pre-war experience. The division of the bread-grain supply between flour and millfeed does not conform to pre-war practice in many countries. Europe as a region, west of Russia, has been counting on a larger population than recent censuses indicate. In most regions, the per capita consumption of bread grains is below the pre-war level, but in some it is apparently above. The meaning of an enlarged or a reduced consumption of bread grains is different in the surplus countries of Central Europe than in the deficit countries of Western Europe. Thus an increased consumption of bread grain in Hungary lowers the exportable surplus, but a decreased bread consumption in Germany lowers the import requirement. The very considerable scope of adaptation in the different countries is to be recognized, and for many purposes each country must be examined individually. Nevertheless, for the present purpose it is useful to look at Europe as a region with a few broad subdivisions, without going deeply into the position of individual countries.

The Program: Its Possibilities and Limitations

The program which is in process of evolution is one of increased self-containment in bread grains, not only in the importing countries but in Europe, particularly Western and Central Europe, as a whole. It involves increase of production and reduction in imports of bread grains, notably of wheat, the grain of which Europe's deficit is largest. It implies substantial imports, perhaps in even larger volume, of the lower-priced feed grains, corn and barley, and of oil seeds. It includes the establishment of priorities and preferences for imports from exporting countries within Europe and certain areas outside.

The initiative in this program lies mainly with Western Europe, though the proposals originated, at least in part, in Central Europe. As a matter of technical as well as political fact, the co-operation of Central and Eastern Europe is necessary in a program of self-containment of Western European countries. Each net-importing country will first determine to what extent the raising of bread grains is to be ex-

panded by one form or another of artificial encouragement. Thereafter, quotas, priorities, or preferences will be set up to cover, at least in good part, the reduced import requirements.

Great Britain might aim at an increase of 10 or 15 million bushels of wheat. The "battle of the grain" would be intensified in Italy. A little additional wheat acreage in Spain would remove her from the list of occasional net importers. Something, but not much, could be accomplished over present returns in Switzerland, Belgium, Holland, and Norway, and a little more in Denmark and Sweden. Substantial expansion could occur in Germany and France, partly at the expense of other grains. In the light of experience during and since the war, it is hardly open to doubt that national policies of expansion of wheat culture in Western Europe could bring about an increase of some 100 million bushels of wheat over the average of the last four years. Such expansion would involve some disruptions of rotations and some reduction of other crops; it would entail higher costs, and growers would expect substantially higher prices; but the result could be attained in the crops if such agricultural policy became state policy.[1]

Central Europe as a region could still expand its wheat production materially. Since the war, wheat acreage has been increasing, and except in Roumania now generally exceeds the pre-war level. A program of larger acreage and higher price could bring more expansion. Corn acreage has also expanded in many areas; a higher premium on wheat would doubtless increase wheat acreage in Roumania, at the expense of corn, and in Central Europe as a whole. An increase of wheat production of 10 per cent in Central Europe, which seems easily possible, would amount to about 50 million bushels.

The situation with rye would be more difficult and intricate. Wheat and rye are companions in bread consumption, but they are less supplementary in agriculture. In part, an increase in wheat acreage would occur at the expense of rye acreage; but the rye acreage could be partly maintained at the expense of acreage of oats and barley, if warranted by price. Rye is quite as important a feed grain as a bread grain. At the worst, the expansion in combined acreage of wheat and rye would occur at the expense of oats, barley, and corn. This would conform to the program, since the domestic prices of wheat and rye would be elevated and the deficit of coarse grains covered by imports at lower price. Given sufficient price incentive, Western and Central Europe could perhaps raise at the outside an additional 200 million bushels of bread grain reducing Europe's import requirements by a corresponding amount, but increasing the feed-grain import requirement by a somewhat larger amount.

The augmented feed-grain import requirement of Western Europe would need to be covered by increased imports from Central Europe, Russia, and overseas. These supplementary imports would be only partly in the form of grain; they would be increasingly in the form of oil seeds from the colonies of Great Britain, Holland, Belgium, and France, and elsewhere.

For the reduced import requirements of bread grains (chiefly wheat) would then be set up an order of preferences that would be something like the following, which are those suggested in discussions in Europe and are in themselves geographically natural. Each country of Western Europe would first give a quota as priority to its domestic growers. The first import preferential would be extended to the countries of Central Europe (except probably by Great Britain). Central Europe would receive also the first preferential in import of feed grains. Thereafter, Great Britain would extend wheat priorities or quotas to the Dominions[2] and France to northern

[1] Improvement in yield per acre is facilitated by the expansion of manufacture of fixed nitrogen and by the low prices of all fertilizers.

[2] For arbitrary illustration, suppose Great Britain should reserve for domestic wheat 15 per cent of the total requirement, and then allocate to the Dominions 60 per cent of the import requirement; this would leave 34 per cent of the *total* requirement to be covered by imports of wheat from Russia, Argentina, and the United States in competition with wheat from Australia and Canada in excess of their quotas. If one will contrast this program with the actual takings of wheat by Great Britain over the past five years, the implication of the plan for the different overseas surplus countries becomes apparent.

Africa. Finally, priority would be extended to the oil seeds of the colonies of Great Britain, Holland, Belgium, and France, these oil seeds being desired by other countries quite as much as by those countries. Lastly, the remaining fraction of the import requirement of each country would be thrown open to Russia, the United States, and Argentina, leaving countries like Canada and Australia, which had enjoyed preferentials, also free to enter into the market for the final fraction. It is conceivable that Russia might receive a preference over the United States and Argentina.

This is not a hypothetical scheme of the imagination. Something very close to such a scheme, though not yet so elaborate and far-reaching, is contained in the agitation for Pan-European trade preferences.[1] It is contained in the program of Empire preference for the British commonwealth of nations. Just how rapidly it will develop and just how far it will go remains to be seen. The objectives are clearly revealed, the movement is in operation, and the trend is unmistakable.

For a more specific examination, it will suffice to use one country, Germany. The population of Germany is around 65 million, and her agricultural circumstances and consumption habits may be taken as roughly representative of a northern European population of twice that number. The German gross requirements for all grains may be taken as 23 million tons, of which only 10 million tons are used for bread and the remaining 13 million tons devoted to animal husbandry, brewing, distilling, and various technical uses. Of the 10 million tons of bread grains used in the bread supply of the country, about half are rye and half wheat; in some years wheat predominates a little, but in others rye, with the post-war tendency in favor of wheat. An average crop of wheat and rye combined will furnish between 11 and 12 million tons, of which wheat will furnish between 30 and 40 per cent and rye between 60 and 70 per cent. It follows that there is a deficit in the wheat supply of from one to two million tons, to be covered by imports, and a substantial surplus of rye varying from year to year, to be disposed of by exports or by feeding to domesticated animals. The surplus of German rye, which is held to act as a direct drag on the rye price and an indirect drag on the wheat price, may amount to over two million tons except in years of an exceptionally short crop of rye. When an unusual glut of rye develops, as was the case three years ago, a local but severe international problem develops between Germany, the rye-importing countries of northern Europe, and Poland, also a rye-exporting country. The deficit in domestic wheat supply suggests direct action; but the surplus of domestic rye supply provokes a complicated problem.

The German view[2] is briefly as follows: The per capita bread consumption is below the pre-war level, probably by 10 per cent. The Germans attribute the lowered per capita ingestion of bread grain to reduction in manual labor, to the small standing army (the soldier's ration was heavy with bread), to a larger proportion of urban population (the peasants are the heaviest bread eaters), and to a larger flour and bread yield per unit weight of grain. The per capita reduction is apparently between 8 and 10 per cent of the pre-war figure, and this has fallen entirely on rye, since the ingestion of wheat has increased. It ought to be possible to restore in a poor country at least the level of consumption of bread, a cheap staple foodstuff, which was customary in the same country under conditions of affluence. The acreage in wheat ought, it is held, to be expanded, largely in replacement of rye, but also of barley and oats. German expert opinion is that the total cereal acreage could be increased 10 or 12 per cent without provoking undesirable rotation changes. Possibly something approaching five million tons of wheat could be harvested in Germany under a

[1] The Russian reaction to Central European claims for preference in Western Europe is to be found in M. Rosin, "Das Problem des Präferenzialsystems und der Meistbegüngstigung und das Programm des Agrarblocks," *Agrar Probleme* (1931), 3 Band, Heft 3/4, pp. 455 ff.

[2] Interested readers are referred to a judicious discussion of the German cereal situation in "Lage und Aussichten der einzelnen Betriebszweige, A. Getreidewirtschaft," in *Die deutsche Landwirtschaft unter volks- und weltwirtschaftlichen Gesichtspunkten*, edited by Max Sering, *Berichte über Landwirtschaft* (Berlin, Paul Parey, 1932), Neue Folge, 50 Sonderheft, pp. 358–442.

high-price policy attended by high price. This would be done partly by expansion of winter wheat, but mostly by expansion of spring wheat.

Granted a sufficient price motive, it is clear that an expansion of spring-wheat acreage is agriculturally feasible in Germany. New spring wheats are being developed in northern Europe and parts of Russia which hold out good promise, since they have passed the developmental stage and are becoming established in field practice. Perhaps the best illustration of the success to be expected in Germany is shown in the progress already accomplished in Denmark and Sweden, where the conditions are similar if somewhat more trying. Sweden now has a larger per capita wheat production than Germany, and has acquired a larger wheat acreage than rye acreage. Denmark is also now producing more wheat than rye. These results are in sharp contrast with the predominance of rye in these two countries before the war.

Acreage expansion is only part of the objective; perhaps fully as important is improvement in yield. If the results should be even remotely comparable with those already achieved in Denmark and Sweden, the expansion would go a considerable distance toward wiping out the deficit being covered by wheat imports. An increase of a million tons in the German wheat crop, with a reduction of corresponding extent in the crop of feed grains and especially of rye, would seem almost to solve the German cereal problem. An increase of a half a million tons in wheat production would place Germany in position to secure the quantities of import wheat still required by purchase of hard wheat from Hungary and Russia, through direct trade barter, without any call on overseas sources of supply.

Methods of Implementing the Program

The implements available to governments to control the growing, import, and utilization of wheat are numerous. Some of these tools date back to the pre-war period, others were invented during the war, and all have been sharpened since the war. When one considers the implements in the light of the broad objective, the affairs of wheat furnish a good illustration of the extent to which a program involves regulations and manipulations. The implements include tariffs, contingent tariffs, embargoes, bounties and subsidies, import certificates, quotas, prescriptions and proscriptions of uses, tax exemptions, freight allowances, unsecured credits, low interest rates, and dumping. The use of these implements is facilitated by the existence of bargaining tariffs. Such tariffs contain provisions for most-favored-nation treatment, but there are various devices for circumventing such provisions.

Early experience made it clear that import tariffs on wheat did not tend to increase domestic wheat prices to the desired extent, or in proportion to restriction of imports. In most countries it has seemed necessary to regulate the disposition as well as the gross supply of wheat. In net-importing countries gluts of wheat of certain kinds developed in particular regions. To obviate these, exports from these regions were facilitated. Thus Germany has employed the import certificate to help East Prussia sell abroad her surplus of soft wheat while hard wheat is imported into western Germany; and France has occasionally granted export subsidies on wheat in order to get rid of surplus quantities or low-grade qualities which forced down domestic prices. In short, to reduce the domestic supply it has been felt necessary, sometimes to an almost grotesque extent, to curtail imports and stimulate exports in net-importing countries.

Even this is not enough for the promoters of the movement. Disposition, it is felt, must be ordered and controlled. This implies regulation of milling, which has been developed during recent years to an extent resembling regulation during the war. Regulation of blending of imported and domestic wheats and limitation of flour imports are the two controls most often applied, the latter designed to please domestic millers and to enforce upon the bakeshops the use of the foreordained flour.

What is usually done is to prescribe the proportion of imported wheat that may be mixed with domestic wheat in the grinding of flour. The blending formulas are supposed to take into account the quantity and

quality of domestic crop, the total flour requirement, the standards of flour to which the country is accustomed, the uses of millfeed, and various technical considerations. In fact, however, they reflect mostly the extent of agrarian preference. When mills in France and Germany are permitted to grind less than 5 per cent of imported wheat, with over 95 per cent of domestic wheat, this leaves no possibility of producing flour of the customary uniformity and composition; it is merely an order to use up domestic wheat. The larger the amount of import wheat required, the more the millers are permitted to turn out flour of customary characteristics. In some countries special regulations exist governing the blending of imported flour and the straight milling of imported wheats in limited amounts to produce special flours for rolls, pastries, and alimentary pastes..

Unreasonable blending regulations provoke bootlegging of wheat and flour. Thus, considerable imported flour and hard wheat has been smuggled into France from the surrounding countries, and it has even been possible to purchase Belgian bread in Paris marketed through illicit trading. But such bootlegging of wheat and flour can only serve a high-price clientele and can not often occur in sufficient volume to modify the outcome of the regulations.

Compulsory milling formulas have driven mills to various methods of improvement and conditioning of domestic wheats. Preheating before tempering is an illustration. Something has been accomplished through these efforts, but the technologists are not yet convinced that the methods constitute permanent improvements in the art.

Another line of effort in increasing utilization when the supply can be restricted is in the direction of higher extraction in milling. This is being introduced in several different countries. Before the war, wheat and rye were extracted in milling to an extent varying from below 60 per cent for the shortest patents to hardly over 75 per cent for the longest straights. During the war, straight extraction of 84 per cent was common. After the war, the mills tried to revert to pre-war extractions, supported by public taste which had tired of dark breads.. During recent years the movement has again been reversed and the trend is in the direction of higher extraction. The mills have learned to produce better flours at higher extraction; perhaps it is fair to say that for customary uses in bread making flour can now be produced with a 75 per cent extraction which is equivalent to pre-war flour of a 70 per cent extraction. Certainly the 84 per cent straight flours now being made in some European countries are far superior to the 84 per cent straight flours made during the war. Higher extraction means reduction of millfeed, but this is in conformity with the program, since supplementary feeding stuffs can be imported.

Finally, in some countries, compulsory stretching is added to compulsory higher extraction and compulsory blending. This again is a reversion to pre-war practices that were overdone during the war. The commonest stretching material is potato—either as flour, chips, or starch, or fresh. Potato is used especially in making rye bread; in fact, 5 per cent of potato is scarcely noticeable in the coarser rye bread. Stretching may also include the use of larger amounts of oats, barley, and corn in the making of coarse groat breads, of which coarse grains are natural ingredients. The Europeans have not forgotten the war breads stretched with various foreign ingredients such as alfalfa flour and ground bullrushes, and the psychology of the public is sullenly resistant to the revival of any practices of stretching that were not in vogue before the war.

Up to the present there has not been much regulation of bakeshop practice. The authorities have tried to achieve their purposes with milling regulations, but in some places the beginnings of baking regulations are to be noted. If it is felt necessary to regulate bakeries in order to make the general policy more effective, this will be done; the war-time legal technique has not been forgotten. It is not beyond possibility that bread prices may be regulated directly, as in some countries they are regulated indirectly now. If Europe is convinced that it is worth while to save the importation of 100 or 200 million bushels of wheat, we must not be surprised if extreme regula-

tions are developed in order to achieve the objective.

Effects on Flour and Bread

It is not to be doubted that in every country compulsory blending of imported and domestic wheats has resulted in a deterioration of the flour according to domestic standards. Higher extraction has tended to intensify this deterioration. The inevitable result of poorer flour is poorer bread. The deterioration of the bread is more or less conspicuous with both wheat and rye bread, varying from country to country, partly in accordance with the strictness of enforcement of the regulations. Usually the tourist in a good hotel can secure wheat rolls of customary quality (legal or illicit), but the breads in the restaurants of ordinary grade are distinctly below customary standards.

Bread constitutes so large a part of the European diet that inferiority is resented. The peasants who raise the wheat and draw the most advantage from the regulations are accustomed to the lowest grades of bread in each country, baked in the village shops; but even from this class protests against poor bread are heard. Under these circumstances discussion has arisen in most countries as to the responsibility for the deterioration. The authorities declare that the customary flour, uniform and of standard qualities, can be made under the regulations, or that, if slight deterioration occurs, this should be borne as a patriotic duty for the good of the country. The authorities have also insinuated that the millers have not done their best and have accused them of sabotage in order to make the regulations unpopular and secure their repeal. The bakeshops come in for their share of the blame, since both authorities and millers contend that, if the bakeshops would adapt their practices to the flour, they could produce an unchanged bread. To this the bakers rejoin that when bread contains only flour, salt, and yeast the characteristics of the bread must be the direct reflection of the characteristics of the flour. The bakers also advance in extenuation that they are hampered by laws protecting labor (night baking), and that many apprentices and young bakers were killed during the war, thus leaving a gap of trained workers which cannot be covered by the available older men.

All in all, however, it is to be recognized that, despite unpleasant recollections of war bread, where desired it will be possible without significant social complaint to decrease substantially the use of wheat and increase the use of rye. Adaptation is facilitated not only by the universal custom of baking bread in the baker's shop, instead of in the home, but by the common use of two bread grains and the existence of many varieties of bread. The circumstances in Germany afford an illustration.

In Germany there are seven common breads, and in other European countries using both bread grains the situation is not very different. There are two main kinds of wheat bread: fine rolls made of short flour with milk, and standard bread made of straight flour. Almost innumerable cakes and pastries are in vogue, but the volume is not large. In the case of rye bread, there is greater diversity, and four or five main varieties may be separated. There is a fine rye bread of white short patent rye, with from 20 to 60 per cent of wheat flour. The next is a standard straight rye bread made with a flour of around 70 per cent extraction, containing no wheat flour or nothing better than clears. Half of the German rye bread is of this type. Next lower in the scale is a gray rye bread, made of flour of around 80 per cent extraction, quite like the traditional soldier's bread. The common bread of the rural districts is the so-called black bread, made of an all-grain flour. A final group includes various kinds of groat breads, whole grain, containing often oats, rye, and corn, of which pumpernickel furnishes an easy but perhaps not the best illustration.

Adaptations are facilitated for millers, bakers, and consumers whenever a number of cereals and various kinds of bread are available. Adaptations in England, for example, would be much more difficult than in Germany. During the war, when Americans tried to find substitutes for the baker's breads to which they had been accustomed, they found little to turn to. Tardieu once remarked to the writer that the outstand-

ing difference between France and the United States was that France had one religion and forty-seven gravies, while the United States had one gravy and forty-seven religions. If for any reason, such as fat shortage, it became necessary to modify gravy, this would be easier in France than in the United States. In the same way, the coexistent use of many cereals, including two bread grains, and the occurrence of many varieties of bread of wheat and rye facilitate in Europe the adaptations to be made by bakers with changes in quantities, qualities, and prices of the different cereals. Nevertheless, the public complains of the adaptations.

Effects on Consumption of Wheat

Poor bread and higher prices for it tend to restrain consumption. This, of course, is not what the landlords and peasants desire. What they desire is a fully normal or even enlarged bread consumption which, with restriction of imports and regulation of milling, will enable them annually to clean out their wheat and rye bins at high prices. In countries which import a large proportion of their bread grains, however, it may appear to officials to be in the interest of the international account to restrict consumption of bread. This can be done, again according to war experience, by urging increased use of porridges of oats, barley, or corn, and of potatoes and vegetables.[1] The home gardens of the war might be revived.

The net effect of restrictions on wheat and regulation of milling is in the direction of lowering the consumption of wheat, of increasing the consumption of cheaper cereals—mainly rye in northern Europe, and to a lesser extent corn in southern Europe.

But this is contrary to the current trend. Ever since the war, wheat has gained in public favor in Europe; rye has lost favor in the rye-growing countries north of the latitudes of the Alps, and corn has lost favor in the Balkans and in Italy. The campaign of the grain in Italy was based in part upon the desire to give the population a better cereal than corn, to which pellagra and other nutritional diseases had been attributed. The agitation in the Balkans to consume more wheat and less corn arose in the face of the agricultural habit in favor of corn and against wheat. In Germany, Austria, Czecho-Slovakia, and Poland the expanding use of wheat became symbolic of a higher standard of living,[2] as well as a reaction against the rye bread of the war. Until the new movement of self-sufficiency began, the tendency in all rye-eating countries of Europe since the war had been to make the coarse rye breads less coarse, the dark rye breads less dark, the light rye bread lighter, to have the mixed rye-wheat breads contain a larger proportion of wheat, and to expand in those countries the use of a standard common wheat bread corresponding to those of France, Italy, and England. This decline of rye in public favor has been one of the factors which made the large rye crops of Germany so burdensome two and three years ago.

But financial aspects of the accepted program may in some countries necessitate a reversal of the popular attitude in favor of wheat and a retreat to rye and corn. Year in and year out, rye is cheaper than wheat; landlords and peasants desire to raise a little more wheat and a little less rye, and secure through restriction a maximum effect on the wheat price with a partial effect on the rye price. Even the districts devoted largely to rye stand to secure some price advantage. All in all, therefore, the new program both demands and is held to justify a changed public reaction to bread. To use more rye would tend to lower wheat importation indirectly, but to use more wheat would create a larger domestic demand, which would support a larger acreage, and this not at the expense of rye acreage if the enlarged wheat demand were an addendum. What is first wanted by agrarians in the European pro-

[1] An increased use of sugar is not recommended in the same way, for trade reasons; the negotiations on the Chadbourne plan made clear the importance attached by Europeans to maintenance of an exportable surplus of sugar.

[2] In a recent discussion of the agrarian crisis in Germany, Kurt Ritter took occasion to warn the Germans that the standard of living would need to be lowered with reduction in foreign borrowings; with this comment was included the hint of contraction of use of wheat and expansion of use of rye ("Die Krise der deutschen Agrarpolitik," *Agrarpolitische Aufsätze und Vorträge*, No. 7, 1931).

gram is not to consume more rye instead of wheat, or more wheat instead of rye, but an added demand for domestic wheat above the present demand for domestic wheat and rye.

A controversy between wheat and rye on nutritional grounds has lasted for generations in northern Europe and flares up on slight provocation. In the Scandinavian countries the public long ago accepted a preponderance of rye as the expression of necessity. In the German-speaking countries, however, the use of rye was advocated on historical, cultural, nutritional, and agricultural grounds, even on philosophical grounds. The strength and endurance of the Niebelungen came from rye; rye sustained the remnant of the population after the Thirty Years' War; rye was the bulwark of resistance to the Napoleonic invasion; rye bread was only second in importance to Moltke in the Franco-Prussian War: so ran the propaganda. During the World War an intensive campaign in favor of rye was characterized by such exaggeration of sentimentality as the urging that use of wheat had softened the constitution of Germans and that return to rye was necessary for its restoration. Rye and beer were the primitive supports of Teutonic peoples, and reduced consumption of both is even today urged by sentimental old-timers in Germany as at once causes and results of decadence.

On strictly nutritional grounds, there is little to be said. In the American diet, bread is strictly a calorie food. In Europe, however, bread is something more. Wheat bread contains more protein than rye bread. In a country with low protein intake where bread constitutes half the diet, the higher protein content of wheat is a fact of importance. But in the countries of northern Europe concerned in the argument, the higher protein content of wheat is hardly a factor of significance. Wheat bread is commonly regarded as being better utilized than rye bread in the digestive tract; but when the breads are made of flours of the same extraction, no significant difference is to be found. Broadly considered, therefore, rye bread is hardly to be called inferior to wheat bread in the European dietary; but certainly there are no grounds for regarding rye as superior to wheat, though occasionally even men of distinguished standing in medicine in Germany do a little public advertising by extolling rye.

Possible Agricultural Response

The agricultural response to the program outlined would vary in different countries. In the British Isles, where practically no rye is grown, wheat acreage is much smaller than formerly and might be increased a good deal. The same is true in France, where rye is quite secondary. In Spain, Portugal, Italy, and Switzerland, where rye is also grown to some extent, opportunities for expanding wheat acreage are limited, but not negligible. In Scandinavia, wheat acreage has recently come to exceed rye acreage, and the tendency may continue further. In Belgium and Holland, where production of rye greatly exceeds that of wheat, substantial expansion of wheat acreage at the expense of rye appears unlikely. In Germany, where rye also predominates, the opposite is true.

Coming now to the countries of Central Europe, we observe that in Hungary, Jugo-Slavia, Roumania, and Greece the production of rye is much smaller than that of wheat; indeed, only in Hungary is the crop of rye large. In so far as cereal culture in these countries is open to extension and intensification, wheat would receive attention rather than rye. If acreage of corn were to be contracted, wheat would gain. At substantially higher export prices of wheat, wheat acreage would expand significantly.

While in southern Central Europe wheat predominates over rye, in northern Central Europe rye naturally predominates. Excepting Czecho-Slovakia there are no countries in northern Central Europe in which wheat production approaches rye production; much more rye than wheat is grown in Finland, Estonia, Latvia, Lithuania, Poland, and Austria. In most of these countries wheat acreage and production have been expanding, but not clearly at the expense of rye. The prospects of wheat in the east Baltic states are not yet clear, since it is not known to what extent the recent successful experiences in the growing of

spring wheat in Sweden and northeastern Germany may be applied to the east Baltic states. Poland has entered on a definite policy of replacement of rye acreage by wheat acreage, in the hope of becoming regularly a net exporter of wheat and reducing the surplus of rye to be exported. In Czecho-Slovakia and Austria there is some prospect of direct replacement of rye acreage by wheat acreage, following an agrarian policy which is politically agreeable to Czecho-Slovakia, since a larger domestic wheat production would relieve the tension between the flour mills of Czecho-Slovakia and those of Budapest.

Russia cannot be considered as a unit. Large areas of Russia raise only rye, others only wheat. In the north, rye predominates, with the expanding accompaniment of spring wheats of new varieties. In the south, wheat, largely of winter type, predominates. Rye is the bread of the masses in Russia, particularly of the peasants. So far as we are aware, the Five-Year Plan contains no provisions specifically directed at change in the relationship of wheat to rye in domestic consumption. The agricultural program of the Soviet government aims to provide an enlarged domestic ration of wheat and rye, according to local taste, and at the same time to secure such an added supply of wheat as would provide an exportable surplus equaling the volume before the war. For internal reasons, Soviet Russia prefers to lay stress on wheat rather than on barley, but the outcome of the policy in terms of export during the next few years is uncertain.

The effect on wheat acreage of the program of self-containment depends on two influences: higher price and accepted policy. Each supplements the other. Higher domestic price, occasional and the result of transient circumstances, would not tempt landlords and peasants to enlarge wheat acreage greatly. But high price secured through a policy in the continuity of which landlords and peasants had faith would bring about expansion of acreage of wheat. Indeed, definitive acceptance of the policy would tend to bring expansion of wheat acreage even before price increase were an accomplished fact.

The crop years 1929–30, 1930–31, and 1931–32 have indicated to wheat producers in Germany, France, and Italy what can be accomplished in supporting domestic wheat prices under circumstances of glut in the world supply of wheat with collapse of world wheat prices to the lowest known level.[1] This three years' experience has not only solidified agrarian opinion in the three countries mentioned, but it has converted agrarian opinion in all the countries of Western and Central Europe to a Continental policy. Each country, whether net-importing or net-exporting, strives to place its wheat growers in an elevated wheat-price position comparable with that recently enjoyed by the wheat growers of Germany, France, and Italy.

The wheat growers of the surplus countries are deeply dissatisfied with what they have received out of mere tariffs. Desirous of having their wheat producers escape the experiences being suffered by wheat producers in overseas countries, the Central European countries have evolved the Pan-European plan of export quotas and preferences to supplement their export bounties and marketing controls. This was formally presented at the Wheat Conference in London in May 1931. Through trade negotiations of one type or another, Central European wheat-exporting countries hope to place their wheat growers, if not in the advantageous position of the wheat growers in the Western European importing countries, at least in a much better position than that occupied by the wheat growers in the overseas countries. The Central European countries hope to convince the Western European countries that wheat growing in the surplus countries of Central Europe can be improved without injury being done to the wheat growers in the net wheat-importing countries of Western Europe. To use arbitrary figures in an illustration, Central Europe would like to see Western Europe raise 100 million additional bushels of wheat and import 50 million additional bushels from that region. This expresses the conviction in Central Europe that the landlords and peasants of Western and Central Europe must stand

[1] See "The World Wheat Situation, 1930–31: A Review of the Crop Year," WHEAT STUDIES, December 1931, VIII, 103–07.

together in order to get higher prices and to maintain or expand their acreage.

In the discussions on expansion of wheat acreage in Europe one finds surprisingly little comment on comparative costs, though a great deal of stress is laid on questions of credit. Apparently two considerations explain the disregard of production costs outside of credit needs. Landlords and peasants will not be driven from the land in numbers if production costs rise, nor will new agrarians enter in numbers if production costs decline. Adaptations occur largely within the unchanging class. Secondly, the prices aimed at are such as to make the enlarged operations in growing wheat appear remunerative, even with substantial rises in costs. It is probably too much to expect for wheat growers throughout Western and Central Europe such increments over world prices as were enjoyed in Germany, France, and Italy during the crop year 1930–31. But even half of that would be regarded in most European countries as a substantial advance, irrespective of probable increases in cost.

Bearings on International Trade and Wheat Price Determination

The inquiry naturally arises whether the Central European countries may not become exposed to a hazardous contingency. If the countries of Western Europe enlarge their wheat acreages, can the countries of Central Europe count on quotas as large as they would otherwise receive? Will not increased production in Western Europe tend to lower imports from Central Europe? No such apprehension seems to be expressed in Central Europe. There the inference is made that the Western European interest in the Central European market for manufactures is so strong as to guarantee to the Central European countries a continuation of the desired wheat quotas, no matter how much wheat raising is expanded in Western Europe. They make the inference that contraction in the Western European market, consequent upon expansion of wheat acreage, would result in reduced import demand from overseas countries and not from Central Europe. But many of the countries of Central Europe have more or less artificial boundaries; this circumstance has the result of creating political and agrarian problems that do not spring directly from regional characteristics.

The European program of self-containment is not merely a scheme to reduce dependence on foreign wheat; it is a huge plan for trade by arrangement and negotiation. The securing of wheat for the net-importing countries by quotas, preferences, and negotiations is not merely an incidental concomitant, another expression of European solidarity; it is an essential part of the self-containment scheme which would not function alone. In order to raise more wheat within Europe and purchase less from outside, it will be found necessary to spread over Europe a network of trade negotiations. Otherwise, other factors than neighborhood will determine the transactions.

We take it that quotas and preferentials can hardly be made effective by political arrangements alone, even in Central Europe. It is clear that the Western European countries can hardly be expected, year after year, to buy fixed amounts of wheat from the Central European countries as the direct expression of European solidarity. Exchanges will necessarily be involved, sometimes credits, but more often purchases of Western European goods by Central European in return for wheat quotas. Even in the case of Dominion preference within the British Empire, something more than Empire solidarity will be required; indeed, the British have already made it clear that the Dominions must extend substantial trade inducements to Great Britain to secure fixed wheat quotas. Russia may be expected to exchange wheat for manufactures quite as much as for bills of exchange. The d'Abernon negotiation with Argentina, which lapsed unfulfilled, indicates the possibility of trade agreements between Great Britain and Argentina.

Of all the wheat-exporting countries in the world, the United States is the only one (disregarding the special sales on credit to foreign governments under the Federal Farm Board) which is not in position under present laws to negotiate specific trade agreements whereby wheat might be exchanged for specified imports. The United

States is the only country, in effect, whose export wheat will be sold on open markets at open prices determined on open exchanges, without specific considerations of other trade, of credits, or of the international account. All the importing countries of Europe can practice barter in their import transactions; all the exporting countries except the United States can practice barter in their export transactions. How important this isolation may become will be revealed only if, as, and when the European plans for self-containment become realized on a large scale.

When Western Europe approaches Central Europe for the stipulated quotas of wheat, it will be largely a purchase of wheat as wheat. There is some high-grade hard winter wheat available in Hungary after the mills of the region have been supplied. But for the most part, Western Europe will secure from Central Europe pretty much the same varieties of wheat raised at home. Of the increased wheat production in individual countries of Western Europe, a part would be consumed in place of imported wheat, but a part would be exported to other European countries, with the aid of import certificates, and replaced by hard wheat, from Russia or overseas.

When Great Britain secures from the Dominions the quotas to be assigned to them, she will be able to secure high-grade soft wheat in Australia for biscuit flour and high-grade hard wheat in Canada for bread flour. The quota system will impose upon Great Britain no significant change in the qualities of wheat made available. Russia will be able to offer to Western Europe high-grade hard spring and winter wheat, and to Italy and France a certain amount of durum wheat. Argentina will offer mostly filler wheats. From the United States will be secured a certain amount of high-grade soft wheat from the Pacific Northwest, and in different years variable amounts of high-grade hard winter wheat from Texas and Oklahoma. Otherwise, the export wheats available in the United States will be largely filler wheats. When Western Europe takes a substantially larger amount of Central European wheats, she will need harder wheats from elsewhere than would otherwise be the case. This means that in most years Canada and Russia would offer wheats distinctly more advantageous to Western Europe than those available in the United States and Argentina. Greater self-containment in Europe implies a lower-grade bread supply, unless the importing countries lay greater stress on hardness and high protein in wheats to be secured on the open market outside of their commitments. The disadvantageous position of United States wheat exports is apparent.

The tactics of exporters in the different surplus countries under the proposed scheme deserve a passing consideration. We take it that export boards would be set up in the net-exporting countries of Central Europe and import boards in the net-importing countries of Central and Western Europe. Several countries already have boards which handle the import and the export of wheat. The transactions between the net-exporting and the net-importing countries of Europe (ex-Russia) would rest on official action, on a prearranged price basis, modified by circumstances of barter and exchange. We take it the prices would not become public, at least not at the time. In the case of Russia, export sales are handled by a single organization which deals with individuals, corporations, or official boards in importing countries. Here again the prices do not become public at the time.

British purchases under quota arrangements with Canada and Australia would be based upon Liverpool, Chicago, or Winnipeg exchange prices, adjusted for quality. The export trade of Argentina is largely in the hands of a few concerns which would probably sell either f.o.b. or c.i.f. to Western European buyers. Sales of hard winter wheat from Texas and Oklahoma and of soft Pacific wheat from the Northwest would be made largely on the basis of cash prices in Western Europe determined by the momentary circumstances of supply and demand.

Under such a scheme, what would become of the so-called world price of wheat? The volume of transactions in Liverpool would be greatly reduced, deliveries would be scattered and sporadic, and the quota-

tions unrepresentative. The British parcels price would hardly remain the going price it now represents. The Winnipeg Grain Exchange would be expected to maintain active operations, supported by trading in Chicago, despite lethargy in Liverpool, with the various quotas and preferences exerting influence on the prices of both cash and futures. The American grain exchanges would continue presumably with little reduction in their activities, since they are now largely domestic—Minneapolis, Kansas City, and St. Louis almost wholly domestic and Chicago largely so. So long as the spread between Chicago and Liverpool remained too narrow for export, the quotas and preferentials would have largely an academic, if restraining, interest. If the price of Chicago should fall to a full shipping differential below Liverpool, then the quotas and preferentials would become active deterrents to export sales. By and large, with Argentina and the United States offering wheats of the same general qualities, the exports would tend to fall to Argentina because, in the nature of her commercial relations, price cutting is easier than with American wheats.

In short, the larger the proportion of European imports purchased on quotas and preferences through negotiation, the smaller the proportion of the business to be expected by a country with free prices and open markets. The more Europe ties up her wheat trade, the less wheat the United States is justified in expecting to export to Europe.

Concluding Observations

It is an old historical observation that class legislation is easy to enact but difficult to repeal. The observation holds for tariffs and all manner of trade regulations. It is to be recognized that economic nationalism is, to a major extent, the product of economic depression. This being true, the movement for self-containment will tend to subside with the restoration of prosperity. In the interval, urban revolt against higher bread prices will grow. But the agrarian classes will cling to their advantages and will make full use of political devices to augment the natural difficulties encountered in removing trade restrictions, once these have been in operation. Therefore, to whatever extent the movement of economic nationalism expands, it will take time to have it reversed. If Europe really carries through to its logical end the plan of self-containment in respect of bread grains, the outcome will constitute for a decade a major factor in wheat growing and trading without as well as within Europe.

We have intentionally projected the scheme to a greater extent than is at present justified by political action. But we have not gone farther than the predictions of the enthusiastic promoters of the project; and the several devices we have considered as extended over the entire area are already in operation in some of the countries. Viewed in its entirety, the plan looks grotesque; but in the present state of political unrest in Europe something resembling it may receive a trial. If an American were to term the plan "grotesque," the European rejoinder would be that it is no more grotesque than the accepted American policy of having a heavy creditor country maintain a heavy positive balance of merchandise trade.

Misgivings on the projected policy are justified on historic grounds, both broadly and specifically. Europe endeavors to expand her agriculture. Other regions endeavor to expand their manufactures. These developments do not correspond with comparative advantages. The rate of growth of agriculture in the world is already in excess of the rate of growth of population; there are reasons to infer that the rate of growth of manufactures has been in excess of the rate of expansion in standards of living. The result is an increase in marginal investments in both agriculture and industry. When the movement has spent its force, it may be found that the political factors which promoted it will not be found qualified to solve the problems of the resultant disequilibrium.

This number is the work of Alonzo E. Taylor.

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