WHEAT STUDIES
OF THE
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THE EXPORT DEBENTURE PLAN FOR WHEAT

THE farm export debenture scheme is an ingenious proposal to supplement our protective tariff by a system of export bounties on farm products of which we produce export surpluses. The bounties would be payable in "debentures" receivable for customs duties. The proponents reason that debenture rates will be reflected back to farm prices, thereby contributing greatly to farmer prosperity and "equality for agriculture."

Our analysis of the plan, as it might be applied to wheat and flour, leads to the conclusion that the results would be highly disappointing. Even in the early stages, farm prices of wheat would be raised by less than the debenture rate. Under the stimulus of expected and realized price increases, production would expand. Consequent expansion of exports would cause declines in world prices, thereby minimizing the enhancement of domestic prices. Ensuing readjustments in acreage, here and abroad, would lead to an equilibrium in which price benefits to American wheat growers would be only moderate, even in the absence of foreign retaliation. Some reprisals are likely; and so far as these materialized, they would reduce the farm price enhancement otherwise possible. Higher prices to farmers as consumers, substantial costs to the Treasury, disturbances to agriculture, industry, and trade, and international complications would tend to offset the gains from limited increases in farm prices.

Pertinent foreign experience with analogous devices tends to bear out this reasoning. The reputation of the debenture plan might be better or worse than accurate appraisal would warrant, for its actual results would be hard to disentangle; but we are convinced that hopes of substantial benefits from its application are illusory.

STANFORD UNIVERSITY, CALIFORNIA
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THE EXPORT DEBENTURE PLAN FOR WHEAT

INTRODUCTION

The farm export debenture plan was first presented to Congress early in 1926, in bills introduced by Senator McKinley and Congressman Adkins of Illinois. Professor Charles L. Stewart of the University of Illinois was the author of the plan, and has been most assiduous in developing the proposal and the case for its adoption. Vigorously and persistently advocated by the National Grange, since late in 1926, as a major element in its program for restoring agricultural prosperity in the United States, it has gradually won increasing recognition and support.

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Early in 1927, near the close of the Sixty-ninth Congress, Representative Marvin Jones of Texas, who had been the author of earlier export bounty bills, introduced his first export debenture bill. In 1928 the plan was embodied in several bills introduced by Mr. Jones and by Representative Ketcham of Michigan, a former lecturer of the National Grange. A compromise debenture bill (H.R. 12892), which included a number of features in common with the McNary-Haugen bill, was rejected by the House in favor of the latter, on May 3, 1928, by a vote of 185 to 146. During the spring of 1929, in the Senate's consideration of farm relief measures, the debenture plan came strongly to the fore. It gained support from previous backers of the equalization fee plan, who despaired of securing the adoption of their favorite scheme in the face of Mr. Hoover's outspoken condemnation of it during the presidential campaign; and from these and others who were dissatisfied with the different and seemingly milder measure favored by the President.

The House bill for farm relief (H.R. 1), drafted in fullfilment of the administration's pledges and passed on April 25, 1929, at no stage included debenture provisions. The Senate Committee on Agriculture and Forestry, however, wrote the plan into the McNary bill (S. 1, Sec. 10), and voted 8 to 6 (with Senator McNary voting against it) to retain it even after receiving, on April 20, a strongly adverse communication from President Hoover. After considerable debate in the Senate, a motion of Senator Watson to eliminate this section from the bill was defeated on May 8, by a vote of 47 to 44; and the bill including this section was passed on May 14, by a vote of 58 to 33. When the joint conference committee returned the compromise bill without the debenture plan, the Senate, on June 11, rejected the committee's report by a vote of 46 to 43. A roll call in the House was the only means of breaking the deadlock. This was taken, without debate, on June 13. The House voted 250 to 113 to instruct its conferees to insist on the elimination of the plan. Thereupon the Senate conceded the point and passed the Agricultural Marketing Act without the section providing for export debentures.

Though defeated for the present, the debenture plan is by no means killed. The recent votes in the Senate and House give an inadequate measure of the political support for the plan. The power and prestige of the new President—on the morrow of his election by a decisive majority, after a campaign in which he had stressed other measures for aid to agriculture—held in line many regular Republicans in both House and Senate who would probably have voted for the plan if he had not condemned it so emphatically and given reason to expect that he would veto a farm bill otherwise satisfactory to him if it contained debenture provisions. The hearings and recent debates have disclosed a well-knit and powerful case for the proposal. While reasoned opposition has lately been presented, it may be doubted whether any of the ardent advocates of the measure was converted and whether many of the neutrals were transformed into genuine opponents of the measure on its merits. Senator Norris, indeed, soon introduced the debenture plan as an amendment to the tariff bill now before the Senate, and a vote on this amendment will presumably be taken in the early fall. Even if the plan is again defeated then, we may expect further pressure for its adoption unless or until other measures taken prove adequate to allay agrarian agitation, or the plan itself is recognized as unworthy of adoption. Under these circumstances an analysis of the plan is something more than a mere academic exercise.

In the discussions of the plan, wheat has figured more prominently than any other commodity; and it ranks second only to cotton among the farm products which proponents of the measure expect to yield the most benefit to producers under the operation of the scheme. It is therefore appropriate to include in WHEAT STUDIES an examination of the export debenture plan, with special reference to its possible application to wheat and flour.

I. THE PLAN AND THE THEORY

The avowed object of the debenture plan is to raise farm prices of agricultural products of which the United States produces export surpluses. It seeks to "make the tariff effective," at least in large part, by establishing domestic farm prices on a level substantially higher than would be determined under the usual conditions in which our exports compete without favor in the world markets. In these respects it is similar to the equalization fee plan. It rests, indeed, upon much the same reasoning: that farmers fail to get their due share of benefits under our existing protective system; that farming is inadequately remunerative because farmers have to sell so many of their products at prices determined in world markets, while they must buy goods and services whose prices are elevated in consequence of our protective system; and that direct measures are called for to extend to farmers the benefits of protective tariff duties, which fail to yield desired results in the case of commodities of which we produce export surpluses—that is, to establish a higher level of farm prices here behind the tariff wall.

The price-raising mechanism, however, is different under the debenture plan. It seeks to achieve its end by a somewhat roundabout process—essentially by offering a premium or bounty on exports of the commodities in question, in the confident expectation that farmers will be enabled to sell the whole of their marketed crop at prices higher than would otherwise obtain, practically to the extent of the export premium.

For the purpose in hand it is unnecessary to trace the evolution of the proposal from its first suggestion through the form that it has taken in various bills. It will suffice to summarize its essential features, with special attention to its maturer form in the latest bills.

PRINCIPAL FEATURES OF THE PLAN

For various reasons—constitutional, administrative, and psychological—an outright cash bounty is avoided.[1] Exporters of debenturable products would be entitled to receive from the Treasury, on due proof that the export commodity had been produced in the United States and had not been previously exported therefrom, bearer certificates called export debentures.[2] Each of these would represent a sum determined by the debenture rate and the quantity exported. The debentures would be receivable at their face value, within a year from the date of issue, in payment of customs duties. The expectation is that demands from importers would create a market for these debentures in which they would sell at

[1] Cf. C. L. Stewart's views in Senate Committee on Agriculture, *Agriculture Relief Hearings*, March 31, 1926, Part 1, pp. 43, 44, 78; House Committee on Agriculture, *Agricultural Relief (Export Debenture Plan) Hearings*, February 10, 1928, Serial E—Part 5, pp. 368–69; *Journal of Farm Economics*, January 1928, X, 29.

[2] The term "debenture" has long been applied to a customhouse certificate given to an importer indicating that he is entitled to a drawback. The term was applied to customhouse certificates issued to grain exporters entitled to bounties under the earliest English corn bounty legislation.

only such a nominal discount as would induce importers to use them instead of cash for payment of import duties.

The numerous earlier bills provided for applying the debenture plan forthwith to a specified list of debenturable commodities, including practically all the farm products of which the United States produces an export surplus, as well as manufactures thereof. Wheat and flour were naturally specified in each bill. Under the debenture provisions of the recent McNary bill, the plan was to be applied by the federal farm board, when necessary to attain the stated objects of the bill, to particular farm products and *food* manufactures thereof. The discussion of the plan in general would be affected by its scope, and that might be quite different in the semi-optional form most recently proposed from what it would be under the more comprehensive plan embodied in earlier bills. As applied to wheat, however, the distinction is of secondary importance, except as it concerns the date on which the plan might be put into effect.

The McKinley-Adkins bills fixed the debenture rates generally at the level of existing tariff duties, except for a rate of 5 cents a pound on cotton, which is on the free list. Chiefly in order to improve the prospects of passage, later bills specified normal debenture rates approximately equal to one-half existing tariff rates, except for a rate of 2 cents a pound on cotton and a single rate on tobacco. But provisions for alterations in rates by administrative action were incorporated in the bills, and the proponents of the plan plainly regarded the initial rates as in no sense definitive or final. The McNary bill designated no specific rates, but required the Secretary of the Treasury to name particular rates in accordance with the following provision:

> *d*) Debenture rates in effect at any time with respect to any agricultural commodity shall be one-half the rate of duty in effect at such time with respect to imports of such commodity, except that so long as no import duty is imposed on cotton the debenture rate thereon shall be 2 cents per pound. The debenture rate in effect at any time with respect to any manufactured food product of any agricultural commodity shall be an amount sufficient, as nearly as may be, to equal the debenture that would be issuable upon the exportation of the quantity of the agricultural commodity consumed in the manufacture of the exported manufactured food product, as prescribed and promulgated from time to time by the board.

Thus, under existing tariffs, the debenture rate on wheat would be 21 cents a bushel, and that on flour not 52 cents per 100 lbs. (which is one-half the duty on flour), but probably around 48 cents. The several 1928 bills particularly made provision for reductions of debenture rates that should be made, either in accordance with a stated schedule or at the discretion of the administering board, in the event of increases in acreage or production beyond stated limits. The Norris amendment to the McNary bill added such a provision, with a scale of reductions copied from the Ketcham bill of February 6, 1928 (H.R. 10568).[1]

While the rates would thus be subject to alteration, by administrative action, by Congressional amendment of the enacting law, or by changes in tariff duties, the system once adopted would presumably be as permanent as the tariff system. In no form has the plan been presented as an emergency measure of limited duration. The McNary bill, while it charged the federal farm board with the duty of applying the scheme under stated conditions, did not empower the board to remove a commodity from the debenturable list or even to reduce the rates except in accordance with the scale set forth. Most of the earlier bills went no farther in these respects. President Hoover, in his ten-point analysis of the latest form of the proposal,[2] virtually prophesied that if it were adopted in optional form, it would soon come to be comprehensively applied. He said in his fifth point:

> Although it is proposed that the plan should only be installed at the discretion of the farm board, yet the tendency of all boards is to use the whole of their authority and more certainly in this case in view of the pressure from those who would not understand its possibility of harm and emphatically from the interested dealers in the commodity.

[1] See discussion below, pp. 326–29.

[2] *Congressional Record*, April 22, 1929, p. 284. In this study all references to the *Congressional Record* are to the original issues. In the bound volumes the paging is somewhat altered.

Conceivably this would prove to be true. Certainly, if once applied to a commodity, the forces tending to prevent its abandonment would be much stronger than those leading to its application, and nearly as strong as the forces which tend to prevent removal of protective tariffs. And it may be assumed that the tendency would similarly be to raise rates rather than to lower them. Probably only definitely convincing demonstration of failure or disadvantageous net consequences would lead to abandonment after trial. Though the plan may be regarded as experimental, it is not a simple experiment that can be tried and dropped at will. The very trial would create conditions which would make continuance easier and suspension or elimination difficult.

Some advocates of the plan, notably Mr. L. J. Taber, Master of the National Grange, have argued that the plan is self-eliminating.[1] But the term is inappropriate and misleading. The argument is merely that if, as, and when we cease to be exporters of a debenturable product, as it is anticipated will occur in pursuance of long-time trends, the plan will become inoperative with respect to that product. Assuming this to be true, the obsolescence of a debenture rate would be caused not by the working of the plan, but by broad economic forces. By putting a premium on exporting these products, the debenture plan itself would tend in the opposite direction, not to accelerate but to retard the decline in export surpluses. So far as the plan exerts an influence, it will be self-perpetuating, not self-eliminating.

In short, the export debenture plan must be regarded as a proposal for a permanent complement to our tariff system, an enduring element in a newly-oriented agricultural policy. It would be permanent, not in the sense that it would be unalterable or inevitably of indefinite duration, but in the sense that there is no natural point of termination and that forces making for persistence will be set up by the adoption of the plan itself.

The Case for the Plan

In the course of a few years the proponents of the debenture plan have elaborated in its behalf a well-knit series of arguments. Some of these are essentially defensive, calculated to meet criticism or to show that it is not subject to criticisms leveled against other major proposals. Some are designed merely to lend it prestige, or to make it appear a highly logical and simple step. Some are definitely constructive. In character and form many of the arguments bear the marks of having been wrought out in the struggle to substitute the debenture plan for the equalization fee plan, or to win the support of devoted adherents of the protective tariff. A broad summary of the case for the plan,[2] with special emphasis upon the constructive arguments, is a natural preliminary to an analysis of its probable operation with wheat.

The defensive arguments run somewhat as follows: The plan is no radical innovation; rather it is in line with approved public policies of long standing—notably the protective tariff and the drawback system. No more than these would it involve a subsidy or tend to provoke reprisals abroad. Its costs to the Treasury and the public would be essentially of the same character as the costs imposed by protective tariffs, and would be fully justified by the stimulus given to national prosperity. It would not threaten the tariff system, but rather strengthen its position. It would involve no special taxation of the farmer. It avoids price fixing, would not foster monopoly, would not put the government into business. Food costs need not be increased appreciably, if at all, by the plan in operation. It would not interfere with business. It would neither restrict co-operation by farmers nor make co-operation compulsory. Tendencies to overstimulate production would be held in check. It would be "consistent with the dignity and independence of the farmer," and "humiliating to none of the leaders in the present discussion of the farm surplus problem."

[1] House Committee on Agriculture, *Agricultural Relief Hearings*, January 10, 1927, Serial U—Part 4, pp. 135–36, 138, and February 14, 1928, Serial E—Part 5, p. 417.

[2] See, for example, the National Grange leaflet, *The Export Debenture Plan*, published in 1928; and C. L. Stewart's memoranda in Senate Committee, *Agriculture Relief Hearings*, April 1, 1926, pp. 73–76.

Of the basic arguments the first is that of justice. As matters now stand, it is argued, the farmers bear a large part of the burdens imposed by our national policies embodied in protective tariffs, immigration restriction, regulation of railroad and other public utility rates to ensure so-called "fair returns" on capital invested, and the like; but they reap little real benefit from these policies and enjoy no comparable benefits from public action. "Equality for agriculture," between farmers and industrial and commercial classes, requires that agriculture be given, not a mere nominal protection through tariff duties that are virtually inoperative on export crops, but a genuine opportunity to raise itself to the same high price level. Equity demands that the tariff be made effective in raising prices of farm products, unless the whole protective system is to be built down. To quote the Grange pamphlet:

> Equality between agriculture and the industrial and commercial groups could be restored either by pulling down the artificial high-price structure made possible for these latter groups through such legislative devices as protective tariffs, immigration restriction, railroad rate legislation, exclusive patents and tariff rebates, or the readjustment could be made by enabling agriculture to take advantage of similar devices to raise itself to this same price level and thus meet the difference in costs of production here and abroad. The Grange prefers the latter—the constructive method — rather than the destructive and disruptive method.

It is further urged that the debenture plan is the appropriate method to employ to this end. To quote the Grange again: "Since the inequalities resulting from the tariff system are the chief source of difficulty, the logical and sensible thing is to apply the remedy at that point." The plan is a natural complement to the protective tariff. According to sponsors of the proposal, it was so recognized by Alexander Hamilton, the father of our protective tariff,[1] and is so recognized by many nations today.

Furthermore, it is represented that the plan would be exceedingly simple to operate, notably simpler than most plans that have been proposed. Its administration would require no large, new, complicated machinery, and only inconsiderable expenditures.

Most important of all the contentions, the plan would work. Promptly and surely it would raise farm prices of the entire marketed crop of a debenturable product by almost the full extent of the debenture rate. It would hold prices up, until we cease to be exporters of such a product, when the tariff duties would become effective in the usual way. Considerable foreign experience with similar devices, it is asserted, fully bears out the reasoning as to the effectiveness of the plan.

The final step in this chain of reasoning is that such price elevation will put the great bulk of American farming on a remunerative basis,[2] not as a single panacea, but as one essential in conjunction with increased tariffs on farm products, changes in land policy, and other desired measures.

"Inexpensive, simple and effective," according to the Grange, "it will adapt tariff benefits to the farmer's needs and will strengthen our entire economic and governmental structure. It will build up prosperity for the farmer and disturb that of no other group."

We do not propose to discuss the validity

[1] For a critical analysis of this argument, see J. S. Davis, "The Export Debenture Plan for Aid to Agriculture," *Quarterly Journal of Economics,* February 1929, XLIII, 258–63. The summary is as follows:

"The similarities between Hamilton's proposals and the debenture plan are three: Hamilton endorsed the principle of bounties; he favored the application of this principle, to a limited extent, to agricultural products; and he contemplated that bounties should be covered out of tariff revenues. Alongside these superficial resemblances, the contrasts are striking and fundamental. Hamilton's limited commendations of bounties on agricultural products related chiefly to bounties on production—not on export; they were designed to stimulate the production of a 'new object of agriculture,' of which we produced too little to supply manufacturers with sufficient raw material of satisfactory quality at moderate price; and he sought to cheapen these materials, not to make them dearer. The export debenture plan, on the other hand, relates solely to export bounties; it concerns the export of 'old objects of agriculture,' of which we already produce a more or less substantial export surplus; and it seeks to raise the price without stimulating the production."

[2] The efficacy of such price advance in restoring prosperity to farmers has not been elaborately argued. Some ardent supporters of vigorous measures of farm relief, including Senator Brookhart and Congressman Haugen, have been unable to see that the debenture plan would contribute more than a fraction of the additional billions that they consider American farmers must have in order to attain normal prosperity and secure their fair share of the national income. See, for example, Mr. Haugen's speech in *Congressional Record,* May 1, 1929, pp. 758–59.

of these numerous arguments, nor to set over against them the counter-arguments that have been brought forward. Several will be touched upon incidentally, some briefly in conclusion, others not at all. We shall not here discuss the broad questions of the justification for direct price-raising measures of any sort, and the extent of price enhancement to be sought. But certain basic arguments for the debenture plan call for careful examination at some length here, with primary reference to its prospective operation with wheat and flour.

The crucial argument in the whole chain is that the plan will really work, promptly, certainly, and continuously, to raise and sustain farm prices of the debenturable products by something approximating the amount of the debenture rates. In comparison with this, even the other constructive points are of secondary importance. If this can be convincingly established, the argument is more than half won; if it is gravely weakened, the whole case tends to crumble. This subject requires consideration commodity by commodity; and wheat furnishes an excellent example, though it cannot be called typical because each commodity presents peculiarities of its own.

Proponents' Theory as to Price Effects

The price effects of the plan have seemed to its sponsors too nearly obvious to require much elucidation or argument. They have not carried the exposition very far because the point seemed to them almost axiomatic. Until recently, at least, their theory has not been very seriously challenged, and even the recent criticisms have appeared not to shake firmly-held convictions or to require extensive strengthening of the case. We must therefore preface the analysis by setting forth, with some care, the theory as the proponents hold it, quoting especially certain passages in which wheat figures as an illustration.

Under the plan, as we have seen, exporters of debenturable products can count upon receiving export debentures with a face value representing the debenture rate multiplied by the number of units exported. These debentures they can sell to importers, who can use them at their face value in payment of customs duties. If, as is contemplated, the total debentures issued are considerably less than requirements for customs duties, importers will presumably pay the face value less a slight discount sufficient to offset the expense and inconvenience involved in using them instead of cash. Exporters, assured of such a "premium" on exportation, can thus afford to bid higher for the goods to export. The theory is that exporters, competing for the opportunity to export debenturable goods and so to obtain the debentures, will bid up the domestic prices of these commodities by almost the full amount of the debenture rates; that similar competition in the earlier stages of the marketing process will result in passing this increase back to the farmer seller; and that the resulting enhancement of prices will affect not merely the exported fraction but the entire domestic crop.

The advocates of the debenture plan seem to entertain not the slightest doubt that such price elevation would be realized. Says the Grange in its supporting pamphlet:

> .... Naturally the effect of such an arrangement would be to raise immediately by approximately the amount of the export debenture, the prices of these farm products now held down to the foreign level. This would follow because any holder of these products could readily sell his supply in the foreign market at the foreign price and get in addition thereto the value of the export debenture or certificate. He would therefore be able and willing to pay a higher price, and the general price level for these crops in this country would ascend rapidly by approximately the amount of the export debenture.

Professor Stewart, in an early statement before the Senate Committee, gave an example with wheat:[1]

> A debenture rate of 10 cents a bushel on wheat would enable exporters and jobbers to bid for wheat not merely the amount which world-market quotations would permit, after deducting for costs, insurance, and freight to foreign markets, but 10 cents more. If the wheat rate were 20 cents a bushel the bid price in interior American points would be that amount above the price otherwise sure to prevail. As a result, the plan would effect a like increase in the price of wheat actually

[1] *Agriculture Relief Hearings*, March 31, 1926, p. 44. In a supplementary memorandum (*ibid*, p. 76), he recognized the qualification, discussed in our text below (p. 316), that the price enhancement would not affect all types and grades equally.

shipped abroad and in the price of all other wheat in interior American markets.

He said further in the same testimony:[1]

> ....when an export bounty is paid the exporters are able to compete, bidding prices as much higher than the world market quotations would otherwise permit as the amount of the bounty would indicate, and through their competition with the millers and other purchasers and handlers within the country the higher price is affected not only in the case of that portion of the crop which actually goes abroad, but that the same higher price is effected with reference to the total crop.

In later testimony before the House Committee, Professor Stewart quoted, from "a report laid before a House Committee 30 years ago," the answers of Mr. George F. Stone, Secretary of the Chicago Board of Trade, to questions put by David Lubin.[2]

> Mr. Stone, I desire to ask you a few questions in your official capacity as secretary of the Board of Trade of the City of Chicago.
>
> What effect would a Government bounty on the exports of wheat have with respect of the general price of wh[e]at throughout the United States?
>
> *Answer.* I[t] would in my opinion increase the price per bushel.
>
> *Question.* It is said that the speculators would get the 5 cents bounty, or at least the greater part of the bounty.
>
> *Answer.* If a bounty of 5 cents a bushel should be given by the Government on all wheat exported from this country, in my opinion the farmer or producer would receive the full benefit of that bounty and not the speculator or exporter. It would simply enable the buyer to pay that much more than he otherwise could pay or would be justified in paying. Competition would force him to pay all he could to the farmer to obtain his wheat. It would be for the interest of the exporter to obtain the wheat; that would be his object. Competition would force him to secure it by every possible means without loss to himself. His great object is to maintain his business, to enlarge his business. Competition would impel him as it now impels him to give every cent that he can possibly afford to secure the product which he seeks to export. The fierceness and intensity and volume of competition, by the very force of circumstances, by the very necessities of the case would drive the 5 cents bounty proposed by the Government into the pockets of the farmer or producer. There it would land and from there it could never be wrested by speculators or by anybody else.
>
> *Question.* It is also admitted by some that the 5 cents would come in some way to the producer for the quantity that would be exported, but that there would be no advance on the greater quantity remaining for home use.
>
> *Answer.* It is a mistake, in my opinion, to say that the 5 cents per bushel bounty which it is proposed to give would be confined in its beneficial results to the quantity or volume of grain exported. It would affect the price of the entire crop, for the reason that grain is a surplus crop in this country, and consequently the price per bushel of this grain is fixed and controlled by the export price of this grain, and this export price, of course, I will here say parenthetically, is made in competition with all the other surplus wheat-producing countries in the world. No domestic buyer will pay one single fraction of a cent more for a single bushel of wheat than the buyer for export will pay. The latter makes the price for the entire crop. If no more were raised than was required for home consumption the price would depend upon the domestic demand; but the export demand is a continuous demand, inasmuch as the demand for food can never be interrupted for any length of time, and this continuous demand for wheat, so far as a surplus wheat-producing country is concerned, fixes the price of the entire crop of this cereal of that country. No class of domestic buyers, of course, can be made to pay any more than the price offered by the export demand, the domestic and the export demand being ever present in the market.

The argument has not been so elaborated with respect to other commodities, but the clear implication has been that what would hold for wheat would hold for others on the debenturable list. The minority report of the House Committee on Agriculture on the Agricultural Surplus Control Bill, submitted by Mr. Ketcham on April 11, 1928, supported the debenture plan as "an extremely simple device which all admit would work and work quickly and positively. . . . . It would automatically lift the domestic price and aid the producer of farm products practically to the amount of the debenture." Mr. Taber said before the House Committee on February 8, 1928:

> There has been no complaint anywhere, no charge made by anyone that the export debenture idea would not raise price levels. It brings the farmer under the protective system, whether tobacco or wheat, to the extent of the amount of the debenture, and raises general farm price levels. No one denies this.

As the foregoing quotations show, the emphasis has been laid on the *price-raising* effects, not on the *price-upholding* effects.

[1] *Ibid.*, p. 47.

[2] *Agricultural Relief (Export Debenture Plan) Hearings*, February 10, 1928, Serial E—Part 5, p. 361.

It is commonly implied that if prices are raised, they will stay up—not necessarily at the same level, for the levels of domestic and foreign prices would both be affected by variations in crops and demand, but on levels higher than they otherwise would be, by the amount of the debenture rate. The possibility that production might be stimulated is recognized, though clearly not taken very seriously by the advocates of the proposal; but this has been generally regarded as a kind of special problem, to be dealt with by reductions in rates if and as production should increase. It has not been generally viewed by the proponents as a possibility that might seriously limit the realization of price advantages.

Method of Analysis

In analyzing the theory one must rely mainly upon reasoning in the light of available facts, rather than upon demonstration and proof. No one can predict with certainty and in detail how the plan would actually work. We are forced to consider reasonable probabilities. In so far as our conclusions or inferences differ from those of the supporters of the plan, they must be judged on the relative merits of the reasoning, and on the reliability, adequacy, and pertinence of the facts employed.

As a matter of fact, even if the plan were tried out and a retrospective examination of its working were made, the conclusions would have to rest in considerable measure on the same sort of reasoning process. Certain predictions would be confirmed or refuted by experience; but crucial questions as to price effects and others could not be definitively answered in full by statistical or non-statistical data. The actual movements of prices, of acreage, of production, here and abroad, could be set forth; but it would prove impossible to ascribe to the debenture plan the true extent of its influence among the many factors at work. This has been the experience in attempts at interpretation of the effects of protective tariffs. Throughout the eighteenth century, when England had in force a system of export bounties on grain, a controversy raged over the effects of this system on prices, production, and trade, on the landed interests and the consuming public. Economists and economic historians have not yet agreed in their interpretation on these points.[1] Whether or not the debenture plan is given a trial, we shall never be able to answer with assurance all the manifold questions regarding its actual working. In attempting, therefore, to foresee how it would work, we are at a less disadvantage than might appear at first sight as compared with analysts after the fact.

For convenience and clarity, we shall divide our analysis into four main parts. First we shall consider the probable operation of the plan on the assumption that production is not stimulated by it, and that foreign countries maintain an indifferent or benevolent attitude. Second, we shall take up the possibilities of stimulus to production, and their secondary consequences, again assuming no resistance or retaliation abroad. Third, we shall examine the bearing of foreign experience with similar devices. Fourth, we shall discuss the possible and probable reactions of foreign governments.

II. REFLECTION BACK TO FARM PRICES

At the outset, let us inquire how the plan can be expected to work if we ignore the possibilities of expanded production and reprisals abroad. How fully would the debenture rates be reflected back to farm prices? To what extent would farm prices of debenturable products be raised, uniformly and generally, or on the average, above what they would have been in the absence of the plan? A number of points of varying significance call for examination in this connection.

The Extent of the Discount

An obvious but seemingly minor question concerns the extent of the discount on the debentures. To the amount of this discount at least, it is recognized that the growers could not reap the full benefit of the debenture rate. They could hope at best to gain no more than the net advantage gained by exporters, and this advantage would be

[1] See below, pp. 333–34.

no greater than the cash value exporters obtained from the sale of the debentures.

In his letter of April 19, 1929, to Senator McNary,[1] sent at the request of the President after the Senate Committee had solicited the President's opinion, Secretary Mellon said on this point:

> . . . . The debentures must inevitably sell at a discount if for no other reason than that they involve a certain inconvenience and will entail a considerable cost in handling and marketing, and since they do not bear interest must inevitably be charged with the cost of carrying them until presentation at a customs house. Ultimately most of them will find their way to New York, where approximately half of our customs receipts are paid, and presumably they will be dealt in there at quotations which may vary widely depending on the amount of debentures issued and the demand therefor, seasonal and otherwise. Machinery will have to be set up for transferring debentures from Galveston, let us say, to New York and for their sale there, which will necessarily involve banking and brokerage charges.

The advocates of the plan readily admit this, and assume that the discount might run as high as 2 or 3 per cent.[2]

Secretary Mellon, however, went on to say:

> If issued in large amounts, as they may well be, it is likely that the debentures will sell at a very considerable discount, which would not only deprive the farmer of a portion of the benefit arising from the debenture rate but represent a bonus to importers and would seriously dislocate the tariff schedules fixed by the Congress. It is not apparent, even admitting the desirability of paying an export bounty, why machinery should be set up the effect of which might be to permit the importation of, let us say, butter from Denmark or wool from Australia at rates lower than those established by law. Such a method of reducing tariff rates would unquestionably injure some American farmers in order to benefit other farmers, ...[3]

Clearly the discount might reach substantial proportions if the total issue of debentures should run above the customs receipts. Indeed, the discount might be much more than nominal if the issue ran above customs receipts only in particular months or seasons, or if it merely approached the volume of customs receipts. The authors of the debenture plan have recognized this danger and have been concerned to guard against the occurrence of this eventuality. It was one of the reasons for setting debenture rates initially at approximately half the tariff rates instead of equal to the tariff rates. It was largely responsible for provisions inserted in the Ketcham bill of February 6, 1928 (H.R. 10568) and in certain other debenture bills whereby rates could be lowered if the total issue promised to exceed 50 per cent of customs receipts in a given year, instead of 100 per cent as in the McKinley-Adkins bills; and for the provision in the earlier Jones bills setting the limit at 40 per cent of the customs receipts, and restricting the use of debentures tenderable on any one imported article to 40 per cent of the duty.[4] It has led to calculations of the volume of debentures that would be required, at the rates commonly mentioned, in comparison with customs receipts.[5]

If the plan were applied to only one, two, or a few commodities, at the rates indicated by the recent bills, there is no basis for a fear that the discount would be substantial. Even if the measure were applied, at one-half the tariff rates, as comprehensively as proposed in the bills of 1926 to 1928, the probability of overissue would be slight at least for some time. On the basis of actual exports of the debenturable products, over a three- or five-year period, it has been calculated that the face value of the debentures issued would average around $150,000,000 a year, or well under 30 per cent of the average customs receipts.[6] If it reached

[1] *Congressional Record,* April 22, 1929, pp. 284–85.

[2] See C. L. Stewart's testimony, in Senate Committee on Agriculture and Forestry, *Agriculture Relief Hearings,* March 31, 1926, Part 1, p. 52.

[3] The rest of the sentence, which is not germane to the present discussion, is as follows: "whereas if a cash bounty were paid the latter would get the full benefit and there would be no dislocation of tariff schedules such as might prove injurious to our present manufacturing prosperity, which is an important factor in supporting the farmers' domestic market."

[4] The latter provisions would increase the probability that discounts would frequently become more than nominal, and aggravate the danger of the emergence of large discounts; for discounts would increase when the current issue of debentures approached 40 per cent, instead of 100 per cent, of current receipts from customs duties.

[5] C. L. Stewart's testimony in House Committee on Agriculture, *Agricultural Relief (Export Debenture Plan) Hearings,* February 10, 1928, Serial E—Part 5, pp. 366–68.

[6] Cf. L. J. Taber's testimony in *ibid.,* February 8, 1928, p. 314; and recent calculations of the Departments of Agriculture and Commerce, in *Congressional Record,* April 22, 1929, pp. 286–87.

an average figure of $200,000,000 a year, suggested by President Hoover, there would still be a large margin even in years of large exports and low imports of dutiable goods, and probably in all seasons of the year.

Nevertheless, the possibility of considerable or heavy discounts would have to be reckoned with if the plan were generally applied. The number of debenturable products might be enlarged. Exports of these products would almost certainly be stimulated, and in individual years might reach very large aggregates. Debenture rates might well be raised above the levels initially provided for. It is quite probable that if rates were set equal to existing tariff rates, in the effort to make the tariff fully effective for farmers producing the whole group of debenturable products, the discount might come to be substantial. Revenues from import duties may conceivably decline, at least in certain years. It requires no great stretch of imagination to envisage a season or a year in which, under such circumstances, debenture issues might be so large as to cause the debentures to fall to substantial discounts.[1]

However, we question whether this difficulty would be experienced. The prospect of such a development would almost certainly lead to reductions in rates or to special appropriations in advance of its occurrence. So great a reduction in net customs receipts as it would imply would attract widespread comment and criticism. On the whole, we think it reasonable to anticipate that the plan would not be applied in such a way as to permit discounts on the debentures to become heavy, or even considerable. More probably, it would be applied so that exporters would realize in cash nearly the face value of the debentures. If this were true, Secretary Mellon's point about the bonus to importers, leading to an effective reduction in tariff rates, would not appear of practical moment, logical though it is.

It should be noted, however, that to keep discounts within narrow limits (as well as to hold down the burden to the Treasury) implies restraints upon the extension of the debenture system, as to scope and rates. If exports should expand notably under the stimulus afforded by rates initially established, some contraction of the system might be called for, in scope, rates, or both. Moreover, if reductions in rates were made in an effort to avert the contingency, these might come at a time when they would be serious for farmers and middlemen alike.

It is a much more complex matter to determine how fully the discounted value of the debenture would be reflected back to farmers, even apart from the possibilities of stimulated production and foreign retaliation.

Bonus to Speculators and Others

Even assuming an immediate effect on terminal prices, to the full extent of the discounted debentures, the initial benefits of the price advance would accrue by no means wholly to the growers. President Hoover said in his letter of April 20, 1929, to Senator McNary:

> 2. The first result of the plan, if put into operation, would be a gigantic gift from the Government and the public to the dealers and manufacturers and speculators in these commodities. For instance, in the principal export commodities the value of the present volume of stocks in possession of these trades would, if the plan worked, rise by from $200,000,000 to $400,000,000, according to different calculations, without a cent return to the farmer or consumer. Every speculator for a rise in our public markets would receive enormous profits. . . . .[2]

This point had apparently been overlooked in earlier discussions of the plan. Its force is not diminished by the rejoinder that precisely the same thing happens when protective tariff duties are raised or imposed anew.

Considering the point with reference to wheat and flour, it is difficult to appraise accurately the amount of the "bonus" that would accrue to non-farmer interests. If prices of the various wheats were raised over night by the amount of the debenture rate, the gain to others than farmers would

[1] Because seasonal variations in exports are not synchronized with seasonal variations in dutiable imports, seasonal discounts might arise, for example, in the summer and early autumn; but these would be of limited dimensions so long as average customs duties exceeded average debenture issues by a comfortable margin.

[2] *Congressional Record*, April 22, 1929, p. 284. See below, p. 311, for the rest of the quotation.

be, under the present proposal, 21 cents a bushel on all the wheat (grain or flour) in the country outside of farmers' hands. The total might lie anywhere between 16 and, say, 100 million dollars, depending on the volume of commercial stocks at the time. The calculation is complicated by the fact that prices would rise well in advance of the actual application of the debenture as the market anticipated and discounted the application. The advance would be spread irregularly over a period of several months. The gain to others than farmers would be based on average commercial stocks over a period; it would be greater than the minimum stated above and less than the maximum. If the debenture were subsequently reduced or abandoned, there would similarly be a loss to non-farmer interests.

It is important to note that the gain by others than farmers on application or increase of a debenture rate, and the loss on reduction or abandonment, would not in practice comprehensively affect mills, elevators, and other handlers of cash wheat. In most regions these uniformly hedge their stocks of wheat (and advance sales of flour), and are little affected by such general wheat price changes. The gains and losses would accrue chiefly to speculators in wheat futures. The net gain to speculators from the application of the debenture, which may be estimated as likely to be in the neighborhood of 40 or 50 million dollars from a 21-cent rate, would be at the expense of the Treasury and consumers. Because it would be spread over a period, owing to the discounting of the expected price advance, not much could be done to control the amount by applying the debenture at a time when stocks were low. The net loss to speculators, when the debenture rate was lowered or removed, would be balanced by a gain on the part of farmers who had sold their wheat at higher prices than the event justified.

The case would be different with various commodities. In this respect cotton would be most nearly similar to wheat; but even for cotton, hedging is less general and less effective than for wheat and flour. With several commodities exchange trading is not practiced. At best, farmers would not get the full benefit of the Treasury cost at the outset, and in case of increases in rates; but this would be only a passing phase.

Increased Risks

As part of his sixth point against the debenture plan, President Hoover averred that "increased risks would absorb a considerable part of its effect. . . . ."[1] In completing his second point he said:

> . . . . Conversely, if, after this elevation of prices, the plan were at any time for any reason withdrawn the trades would suffer a like loss and a long line of bankruptcies must ensue. But in the meantime the trades, out of fear of withdrawal or of reduction in the subsidy, would not engage in normal purchase and distribution. Either exorbitant margins would be required or alternatively the farmer would be compelled to himself hold the Nation's stocks until there was a demand for actual consumption.

Obviously if the debenture system were certain to remain unchanged for a period of years, this objection would not hold. But no one could be sure of this. In the light of our subsequent analysis of probable benefits to the grower, the probabilities of expanded production, the possibilities of increased cost to the Treasury, and the risks of retaliation abroad, we feel that apprehensions as to discontinuance of the system might be considerable, if not from the outset at least within two or three years. The possibility of changes in rates, under a system of flexible rates or otherwise, would increase trading risks, and so require a sort of insurance premium charged by holders of commercial stocks.

This argument is valid for commodities in which hedging is not generally practiced, though we believe that President Hoover viewed with undue apprehension the consequences of such uncertainties as would exist; but it is less valid in the case of wheat. The net loss from the abolition of the scheme would fall mainly on speculators, as indicated above, and would not be large in relation to the losses commonly taken in the ordinary course of price fluctuations. The added risk from uncertainty as to the continuance of the debenture would be not unlike many risks upon which grain speculation thrives. In general it should not affect margins of dealers in wheat, and

[1] More fully quoted below, p. 312.

would probably not lead to any significant alteration in current practices as to holding or hedging stocks, on the part of farmers, grain dealers, or millers. We therefore question whether the wheat grower's benefit from the debenture system would be appreciably reduced in consequence of this risk factor.

Increase of Exports

Increased exports, even apart from expansion in production, would constitute a minor factor tending to reduce the net gain by farmers to less than the full extent of the debenture rate. The offer of the export bounty, and the raising of domestic prices, would tend to bring about some reduction in domestic consumption and some increase in exports. The increase in exports, indeed, might easily be larger, in the initial year, than the reduction in consumption, for stocks could usually be drawn down. The addition to exports would exert some downward influence on international wheat prices. Hence even if the system maintained a differential, almost equal to the debenture rate, between domestic and export prices, the level of export prices would be somewhat lowered, and the net advance in farm prices would be correspondingly reduced to a slight extent.

As Secretary Hyde said in his letter of April 20 to Senator McNary:[1] "In order to dispose of the surplus the exporter would have to make some price concessions to meet the competition from other countries and this would tend to depress world prices." Wheat exporters are concerned not merely with their margin of profit in particular transactions, but also with their volume of business; and they seek to secure the maximum net profit on their operations in the aggregate. If a premium were offered them to export American wheat, they would naturally seek to retain as much of this premium as possible and to handle a larger volume of this wheat; and they would probably be stimulated to seek out foreign markets for American wheat, particularly of types and grades that are cheapest here. In so far as they were able to increase their volume of export by offering the wheat cheaper than under present conditions, they would certainly tend to do so. The reasonable prospect is that they would succeed in enlarging their volume of exports only by so doing. Competing for additional wheat for export, they would doubtless tend to force up farm prices, but under such conditions, they could not afford to bid up the domestic price by the full extent of the debenture rate. They would be naturally indifferent, in a business sense, to the ulterior consequences of their operations on the farmer, and would make little or no attempt to gauge them.

The initial importance of this factor might be insignificant, but it would assume greater importance if and as production and exports should increase under the stimulus of higher prices. The increased volume of inferior wheats available for export would tend to lower their position in the range of wheat prices in foreign markets. How far this difficulty might be overcome by improved merchandising efforts, such as the Canadian wheat pool has made and as an export corporation would doubtless make, it is impossible to estimate.

Imperfect Competition

In the next place, it is rash to assume such perfect competition among exporters, and especially in earlier stages of the merchandising process, that the full amount of the sale value of debentures would be reflected back to farmers, even if there were no complications as to type, grade, quality, and location. Secretary Hyde said in his letter of April 20 to Senator McNary:

> .... Furthermore, it is possible that exporters may not bid prices up to the full extent of the debenture less the normal exchange discount on the certificate. It is therefore possible that exporters might be in a position to derive an extra profit by not reflecting in prices paid to farmers the real value of the debenture. ....

In his sixth point against the plan President Hoover said in part:[2]

> .... it seems certain that a large part of it would not be reflected back to the farmer. It offers opportunity for manipulation in the export market none of which would be of advantage to the farmer. The conditions of competitive marketing at home and abroad and the increased risks would absorb a considerable part of its effect into the distribution and manufacturing trades.

[1] *Congressional Record*, April 22, 1929, p. 286.

[2] *Ibid.*, p. 284.

Questions on this point have caused the authors of the plan some concern. In general they have answered that the Federal Trade Commission could be counted upon to help in correcting abuses of this sort that might arise; that co-operatives would develop their export business and help make competition effective; and that if need be export corporations might be set up in the farmers' interest to insure the full and fair operation of the reflection process.[1] Under the Ketcham and Jones bills of April 11, 1928 (H.R. 12892, 12893), export corporations were provided for. The co-operatives and stabilization corporations provided for by the recent Agricultural Marketing Act might be regarded as affording equivalent or better machinery. Action by such agencies might be called for, on this ground as well as on others (see below, p. 314).

No one can really appraise the possible extent to which, if at all, collusion or combination among exporters, or manipulation of domestic or export markets, or like efforts would limit the farmer's gains from the debenture system. In view of the growing tendency toward combination and the fact that most of our grain exports are now handled by only a few concerns, conditions would presumably not be unfavorable. Moreover, it would be difficult to detect many types of such practices, or to fix any "guilt" upon parties responsible for impeding or limiting the reflection of the debenture rate back to the grower. There are, under present marketing conditions, numerous complaints that wheat growers fail to get the full value of their product. That this is true in individual instances is not open to doubt, but that it is true on the average is difficult to say.

On the whole, we are disposed to regard this sort of possibility, like those mentioned above, as of minor importance, particularly as compared with possibilities lying within the limits of competitive operations. To discuss these requires some reference to current trade conditions.

[1] Cf. House Committee, *Agricultural Relief Hearings*, February 8, 1928, Serial E—Part 5, pp. 311–12 (Taber), 325 (Connally).

[2] Cf. T. D. Hammatt, *Methods of Merchandising American Wheat in the Export Trade* (U.S. Bureau of Foreign and Domestic Commerce Trade Information Bulletins 183 and 185), February 1924.

Phases of the Competitive Situation

Many proponents of the export debenture seem to picture wheat exporters as a considerable group of merchants carrying large stocks in trade, namely, export wheat, with a simple and direct relationship between the buying and the selling prices into which the figure for the export debenture may be inserted after a fashion quite as simple as a bookkeeping entry. The true picture of the circumstances involved in the export of wheat is quite different.[2] Wheat exporters in the United States do not constitute a large group of independent American merchants whose business is confined to the export of United States grain. The great bulk of the business is handled by a few concerns. Some are American concerns with foreign connections; others are American agents of European concerns. Very little export business is now handled by co-operatives, though under the new legislation this export volume handled by wheat co-operatives or the Wheat Stabilization Corporation will presumably grow. Most of the exporters handle Canadian wheat as well as American, and indeed usually find Canadian wheat representing the larger part of their volume. The business of exporting wheat involves intricate transactions of infinite detail. Wheat price relationships are never simple and persistent, and it is difficult to say when they are most complex—in a year of short world crop with rising prices, or in an ordinary year of relatively easy adjustment, or in a year of plenty when wheat-importing countries can pick and choose with great freedom.

The American wheat exporter is really a middleman, working on a self-set margin, with occasional reward for unusual shrewdness. To some extent, exporters carry stocks of wheat in readiness for export business, at least in certain advantageous positions. But for the most part, they purchase the wheat necessary to fill an export order subsequent to having accepted an offer from some foreign country. Since most export wheat is sold c.i.f. port of destination, when the American exporter accepts an offer he must know in what positions wheat is lying, for what the export grades may be purchased, and the momentary situation in ship space. In the customary transaction, the exporter engages his ship space and then purchases his wheat from local intermediaries, commonly termed "fobbers," who expedite the wheat to the port of embarkation. The transactions down the line are protected by hedging. Probably there is more judgment displayed by the exporter in contracting for ship space than there is in contracting for wheat from fobbers; certainly, the handling of the shipping end is quite as important as the dealings in the buying end.

It is incorrect, moreover, to assume that there is a continuous and even merchandising of wheat, and a continuous and even absorption of wheat by mills upon which a continuous and even absorption of wheat by exporters would exert a continuous and even effect on price, approximating the figure of the debenture. The wheat market is not continuous but more or less seasonal and is, in addition, subject to irregular and wide fluctuations. There are times when the mills are buying wheat heavily, while at other times they are scarcely in the market. The period of heavy seasonal mill buying may coincide with heavy seasonal export buying, but need not. Only where the circumstances justify the use of the trade term "seller's market" does anything exist corresponding with continuous competition between mills and exporters. This is all the more true because, for the most part, the mills and the exporters are bidding on different grades of wheat, since in most years those wheats pass to export which are the culls of the crop. As a specific illustration, witness Duluth. From Duluth are exported the substandard spring wheats which have filtered, so to speak, through Minneapolis. One cannot picture the bidding of exporters for the wheat passing out of the Duluth gateway influencing in a consistent and even manner the purchasers in Minneapolis of the milling wheats from which the wheats available in Duluth have been rejected.

We are constrained to feel that an export board of some sort would be necessary to ensure the maximum possible reflection of the debenture rate back to the farmer. Competitive bidding of exporters would not be enough, except in years of world shortage, to drive up terminal prices by anything like the figure of the debenture rate. It would probably be necessary to have an agency with a revolving fund, able at any time to enter the market for the furtherance of the export movement. In the experiences of the United States Grain Corporation, it was necessary for the corporation to buy wheat, at times heavily, in order to maintain the guaranteed price. No action might be necessary in a particular year in respect to certain wheats; but in each year it would probably be necessary in respect to certain wheats, and in some years in respect to all wheats.

If export activities by a central agency were undertaken to promote the success of the system, the operation would presumably be attended by export losses on the part of such agency. There is, however, no provision in the export debenture plan for the disposition of such export losses. Thus, to make the plan effective, a procedure would be necessary which would occasion the emergence of a subsequent dilemma, for the solution of which the plan was not designed and makes no provision.

Effects of Diversity in Wheats

Thus far we have proceeded on the common assumption that wheat is wheat, and flour flour, without distinction of type, grade, quality, and source of production. But in fact our wheats are multifarious, of several types, many varieties, and numerous grades, produced in widespread agricultural regions, and commanding widely divergent prices at any given time. Flours too are of many types, classes, and grades. Not all debenturable commodities are correspondingly heterogeneous, but none is truly homogeneous. While this fact has not been altogether overlooked by spokesmen for the debenture plan,[1] its significance for the central theory has not been generally realized in connection with the plan.

In the case of wheat, for example, the United States produces several distinct types adapted to different uses. The chief types are hard red spring, durum, hard red winter, soft red winter, and (soft) Pacific white. Hard red spring and hard red winter are both primarily bread wheats, and

[1] Cf. Charles L. Stewart's testimony before the Senate Committee on Agriculture, March 31, April 1, 1926, pp. 53–54, 59–60, 76.

are broadly competitive, although geographical factors limit the effectiveness of this competition. Durum is used chiefly for making alimentary pastes, and soft red winter largely for pastry and biscuit flour; neither competes with the other or strongly with the bread wheats. Pacific wheats are used for bread or pastry flour, and would compete more extensively in domestic markets with soft and hard red winter (principally soft) if it were not for heavy costs of shipment eastward; as it is, little of this wheat goes east of the Rockies even when, as in 1925–26, 1927–28, and part of 1928–29, soft red winter commands high premiums, though flour made of Pacific wheat competes to some extent on the Atlantic seaboard. There is limited possibility of substitution between durum and hard bread wheats, or between hard wheats and soft wheats, although when large price differences among the groups occur, further adaptations either in manufacture of flour or uses of flour are made. The relation of crops to domestic requirements for these various types is such that the United States is nearly always on an export basis for durum and Pacific wheats, rarely so for hard red spring wheats, and more commonly for hard winter than for soft winter wheat.

Not only does our wheat crop comprise several different types that are (except for hard spring and hard winter) sufficiently distinct in uses or areas of production as to be either almost non-competing or competitive only under considerable disparity of prices; wheats of a single type grown in the same region vary in grade and quality so greatly that different lots command very different prices.[1] Within a single grade, on the same day, in a single market, the prices actually paid for different lots frequently vary over a surprisingly wide range.[2] Thus on October 3, 1928, 624 carloads of hard spring wheat were sold on the Minneapolis market. Carlot prices ranged from $0.95 a bushel, for a car of Northern Spring sold on sample, to $1.39 for one car of Hard Spring and one of No. 1 Dark Northern. Prices of different carloads of No. 1 Northern Spring, the commonest and the standard contract grade, ranged from $1.09 to $1.33, whereas the December future varied only between $1.131 and $1.142. Differences in protein content are the principal factor responsible for such variations, but there are many other factors. The relations between prices of different wheats within the wheat price range tend not only to vary from year to year with unchanged price level but also to be different at different price levels.

In practice, as a result of such conditions, our exports of wheat grain consist largely of durum and Pacific wheats, moderately low grades and qualities of hard red winter, and in certain years corresponding grades and qualities of soft red winter.[3] Nearly all of the hard red spring and practically all of the better grades and qualities of hard and soft red winter are retained for domestic milling, except in occasional years when crops are so large and good that domestic requirements for these types and qualities are easily satisfied and a surplus remains. Except in the case of durum and soft Pacific wheats, and not always for these, our exports of wheat grain are seldom if ever representative of the crop; they are characteristically much below the average of the crop, and still further below the fairly rigid standards for domestic consumption.

Our exports of flour ground from domestic wheats comprise three fairly distinct groups: limited amounts of high-grade flours ("patents"), from soft or from hard wheat, which go to foreign markets demanding a high quality product; medium-grade and common flours ("straights"), which result chiefly from the desire of domestic mills to keep costs down by high capacity operations; and low-grade flours ("clears"), which are essentially a by-product in the production of patent flours, and for which there is little domestic demand in relation to the supply.[4]

[1] Also, different varieties within the same type differ considerably.

[2] Cf. *Variations in Wheat Prices*, WHEAT STUDIES, June 1929, V, 246–52.

[3] The official statistics of wheat exports by classes and grades are not very satisfactory. See, however, WHEAT STUDIES, December 1928, V, 105, Table XXI; or *Yearbook of Agriculture, 1928*, p. 684, Table 18. Statistics of exports by customs districts yield useful supplementary information.

[4] On this paragraph see especially WHEAT STUDIES, March 1925, I, 126–31; and further below, pp. 319–21.

Our exportable surplus of wheat, then, is not a simple fraction of a homogeneous commodity that is produced in excess of domestic needs. It is much less nearly so than was the case before the war.[1] It consists in large measure, though by no means wholly, of particular types, grades, and qualities of wheat and flour that are not readily marketed here, and indeed often abroad, except at substantial discounts. To a considerable extent the surplus is qualitative as well as quantitative. Standards and practices vary so much that certain classes of wheat and flour are esteemed more highly here than in foreign markets, while others find a better market abroad than at home.

All this is familiar to millers, grain and flour merchants, many farmers, and all close students of the wheat situation; but it is largely unappreciated by many of those who have discussed the reform of our agricultural policy. The extent to which wheat is not simply wheat, not a single homogeneous commodity but a group of commodities, constitutes a fact of major importance in any discussion of the position of wheat growers and what can be done to improve their position. Something comparable is true of other farm commodities, such as cotton, tobacco, and corn, which figure prominently in the discussions. In the case of corn the problem is especially complicated by the fact that corn is predominantly a feed crop, and that the largest single fraction of the crop is used to feed hogs, from which a great variety of joint products are obtained.

The bearing of this can perhaps be made clear with reference to wheat as a debenturable commodity. The bills thus far presented prescribe a debenture rate for wheat, without distinction as to type, grade, or quality, just as the tariff rate is 42 cents a bushel on *wheat* of any kind.[2] If, now, a virtual bounty is offered to exporters of our wheat and flour, it will clearly stimulate them to bid higher for these commodities; but it does not follow that the bidding would be equally effective on prices of the various wheats. In the cases of durum and Pacific wheats, lower grades of hard bread wheats, and sometimes of lower grades of soft red winter—wheats that in any case would be moving into export—there is substantial reason to expect the higher prices to be largely reflected back to growers, subject to qualifications elsewhere mentioned. In years of a large crop of hard red winter, of good quality, the price-lifting influence would probably be most general and most pronounced, though premiums would probably then be low.

But in most years, as a result of conditions outlined above, some wheats command substantially higher prices for domestic use than for export. Even with the addition of a full 21 cents to the normal export bidding price, a large volume of these would in ordinary years be beyond the reach of exporters, so great is the premium offered for them in the domestic markets. Another part would be brought within the range of export possibility, as a result of the export bounty. The prices of high-premium wheats might conceivably be unaffected by the operation of the debenture plan. It is by no means certain that millers who buy high-grade wheats at premium prices would be forced to bid 21 cents more for these wheats simply because exporters were bidding 21 cents more for low-grade wheats. They might need to bid only a few cents more. Probably the prices of most contract and premium wheats would be raised to a certain degree, varying with the type, grade, and quality, in any one of several ways: for example, by direct bids which necessitated such increase in premiums as to keep them here; indirectly through raising the price and thus decreasing the economic substitutability of other types, grades, and qualities; or still more indirectly by causing contraction in the acreage and crops of such wheats in consequence of expansion of other types, as in

[1] Primarily for this reason, the opinion of Mr. George F. Stone (quoted above, p. 307), which may have been correct for conditions of the period when he spoke, would not hold good today.

[2] Professor Stewart recognizes the logic of establishing a series of different tariff and debenture rates for different types of wheat. See his testimony before the Senate Committee on Agriculture, March 31, April 1, 1926, pp. 53–54, 59–60, 76. No bill has attempted such a differentiation, and since the relationships among types, grades, and qualities vary considerably from year to year, it may be questioned whether such differentiation could be made flexible enough to serve the purpose. As to flour, see below, pp. 319–20.

the case of durum in the northwest. If expansion of production should take the course we anticipate, and the production of high-quality hard winter wheat be especially stimulated, premiums on hard red winter and hard red spring wheat might be materially reduced in consequence.

Reasoning on the facts as we see them, and in the light of trade experience, we can see no adequate justification for accepting the theory of uniform reflection of the debenture rate in farm prices, on these grounds alone. If the exportable surplus could be removed in a block, in the beginning of the season, this would stimulate competition between mills. But the exportable surplus does not appear in the beginning of the crop year; it is filtered out during the course of the crop year. If a treasury certificate enabled American exporters to bid up the price of contract-grade wheat 21 cents a bushel, at such times as it was expedient for foreigners to purchase wheat in this country, we see no reason to believe that domestic mills, selecting their stocks of wheat as successive harvests appear, would pay 21 cents more for the several premium wheats than would otherwise be the case. The wheats are not all placed on sale at once and the domestic and foreign buyers are not all there to take all the crop at once. The merchandising of a wheat crop is a highly selective process, and we cannot believe that any artificial device for changing the selling price of a subsidiary fraction of the crop will correspondingly affect the price of the entire crop.

A specific reservation deserves emphasis in respect of hard spring wheat. In years of usual crop characteristics, No. 3 Manitoba Northern has the same milling value in the United States as No. 1 Dark Northern. Often the c.i.f. price of duty-paid No. 3 Manitoba Northern wheat, at milling points such as Buffalo on the Great Lakes, is within 10 cents of the c.i.f. price of No. 1 Dark Northern. The advance in price of domestic hard spring wheat under the debenture system would be checked at the point of price parity, in milling values, of duty-paid Canadian wheat. To get from an export debenture any considerable increase in price of domestic hard spring wheat would necessitate raising the tariff above 42 cents.

The distribution of the advantages yielded by the system, and their secondary effects, also deserve attention. Clearly the wheat growers in the Pacific Northwest would tend to profit. The growers of durum in the interior northwest would also tend to benefit materially, while their neighbors growing hard red spring would presumably gain less; hence farmers in that region would tend to increase their durum acreage, to some extent shifting from hard red spring wheats to durum,[1] thus tending to increase our already growing exportable surplus of durum and our deficiency of high-grade bread wheats. Growers of soft wheat in the central west, where wheat farmers have apparently suffered much, would probably gain much less in many if not most years. Wheat growers in eastern deficiency regions, for various reasons, would probably be affected but moderately. Growers in the hard red winter-wheat belt would stand to gain relatively more in most years; since it is in this southwestern region that, for several reasons, acreage has tended most to expand rather than contract even in the face of prices generally regarded as unremunerative, further expansion in this area would be stimulated. The geographical distribution of the gains, therefore, would be far from uniform.

Apart from geographical considerations, the producers of less desirable wheats (as domestically appraised) would gain most, while the producers of premium wheats would gain least. Producers of export types would stand to gain most, and producers of deficiency types least—a result tending to increase the size of the export surplus, in both quantitative and qualitative senses. Such results can hardly be regarded as in the interests of agriculture or the national economy.

The Matter of Export Parity

It is commonly implied, in discussion of the problem of exportable surpluses, that we export routinely and that current prices in this country are continuously determined by or linked with prices in outstanding foreign markets. By export price

[1] Some such shifting has already been in evidence, in spite of the fact that in most recent years durum wheat has sold at prices considerably or heavily below those of bread wheats.

parity we mean that the price of wheat in Chicago and other markets, as of grade and quality, is no higher than the price of wheat in Liverpool when adjusted for transportation charges and other costs of movement. When the exportable wheats of Canada, the United States, Argentina, and Australia all stand at export parity, this means that the prices in the exporting countries and demand in Europe are so adjusted that a particular buyer in Europe can purchase in anyone of these countries on the basis of quality at relatively comparable prices. Of course, wheats cannot be exported routinely from any country if the price in that country is above export parity, i.e., out of line with the world market. Now despite the fact that we have been active exporters of wheat, it is surprising to note how frequently since the war, and how much of the time in the several different years, the contract prices of wheat in Minneapolis-Duluth, Chicago, St. Louis, and Kansas City have stood above export parity. Indeed, on several occasions the prices of wheat futures in Chicago have stood but little below those in Liverpool. Influences have been at work in this country tending to hold wheat futures high relative to other countries, which naturally has favored exports from other countries and not from the United States. The more effective the tariff, high domestic standards, and speculation are in elevating domestic prices of wheat, the more difficult it becomes to export such surplus as we possess.

One may further adjudge the times when our prices have been at or above export parity by reference to monthly statistics of wheat exports by customs districts. These data suggest, though they do not prove, that since 1921–22 hard and soft red winter wheats have been definitively upon an export basis throughout the whole crop year only in 1921–22, 1922–23, 1924–25, and 1926–27. They were not on an export basis throughout most months of 1923–24, 1925–26, 1927–28, and 1928–29; at least the wheat exports of all varieties of wheat except Pacific white and durum constituted a mere trickle in the last two-thirds of each of these years, even though there seems to have been plenty available for export in each of these years except 1925–26. Even without precise comparisons of price spreads between American and foreign markets, one is probably justified in assuming that United States prices of representative wheats were out of line with, say, Liverpool prices in most periods when exports were nil or negligible.

All this has an important bearing on the working of the debenture plan. The usual theory of the full reflection of the debenture rate in farm prices assumes that we are regularly on an export parity, for any and all wheats. This assumption, as we have seen, is contrary to the facts. In some years of relative domestic shortage of certain wheats, the domestic price may be above export parity through most of the crop year. But even in some years of relatively free export, domestic prices of certain wheats will be alternately above and below parity. The theory of the proponents further assumes that the effect of the debenture plan would be to raise domestic prices to a new export parity, 21 cents higher than the previous export parity. If this were true, the export debenture could do no more than raise our prices to the altered export parity. For illustration, let us assume that it costs 20 cents to move wheat from Chicago to Liverpool; if the Liverpool price is $1.50, then export parity price in Chicago must be $1.30. If, instead, Liverpool is $1.50 and Chicago $1.40, and an export debenture rate of 21 cents is established, the Chicago price could not be raised above $1.51, the new export parity; and the advantage from applying the debenture plan, so far as wheat of contract grade is concerned, would be only 11 cents, even neglecting an effect upon Liverpool prices.

Without wholly endorsing this calculation or the assumptions underlying it, we feel assured that the quantitative reflection of the export debenture back to producer would be different, if the domestic price were at or below export parity, than if it were materially above it, and would tend to be smaller whenever domestic prices would otherwise be out of line with prices in world import markets. In a year of extremely short domestic supplies, such as 1925–26, with practically no representative wheat available for export, domestic prices would stand, through most of the year, above an export basis, with or without the debenture. It cannot be assumed, however, that in such a year, with the debenture in effect, prices would be as far above the new export parity as they would have been, in the absence of the system, above the old export parity. The debenture could not be expected to enhance domestic prices, in such a year, by anything like the same amount as in a year of active exporting. In such a year the tariff on wheat and flour would have its maximum effect in keeping up domestic prices; and even the proponents of the debenture plan do not expect its full influence to be superadded to such influence as the tariff already has.

What is true of such exceptional years as 1925–26 would be true of portions of other years, and indeed almost continuously with one or another type or grade of wheat. For these reasons alone, a varying but more or less substantial part of the promised advance in prices, as a result of applying the debenture scheme, would fail to eventuate.

The Case of Flour

The possibilities for imperfect reflection of price advantages back to the grower, under the debenture system, would seem to be larger in the case of joint products. Flour is a serviceable example. Its importance is suggested by the facts that the great bulk of our marketed wheat crop is milled in the United States, and that well over a third of our wheat exported in the past few years has gone abroad in the form of flour. The reflex action upon farm prices of wheat will necessarily depend heavily upon the bidding of millers, and this will be affected by the application of the system to flour exports. Despite their importance, there is no evidence that either proponents or critics of the debenture plan have given particular attention to flour or other joint products such as lard. We do not claim to have thought the matter through; but even cursory consideration reveals a complexity that is inconsistent with the reputed simplicity of the debenture plan, and suggests considerable possibilities for alterations in trade.

The miller has a raw material cost, somewhat modified by the outcome of his hedging account. He has expenses of manufacture, of management, and of selling. Broadly speaking, if he is making straight flour, he has one principal product, and one class of by-products collectively known as millfeed. As the miller views it, the millfeed is sold for what it will fetch, and the flour must be sold for enough to balance the account and leave a net profit. When the mill makes patent flour, an additional by-product appears, namely, clear flour. Clear flour—like millfeed—must be sold for what it will fetch; or, if the mill chooses to regard clear flour as a principal product, separate expenses and a joint expense must be set up for patent flour and clear flour. The actual situation is much more complicated than this, for there are many more than three homogeneous classes of flour and one of millfeed. A large part of the miller's problem consists in so buying his wheats, and so milling the wheats that he buys, as to yield, in the light of the cost of the wheats, his manufacturing and selling costs, and the price obtainable for his various products, the most profitable combination of flours and millfeeds.

This problem millers would face under the debenture system; but there would be modifications in the problem with respect to the domestic prices of American wheats, the relative costs of Canadian wheats for grinding in bond duty-free or for domestic flour use duty-paid, and the altered domestic prices of the various flours and millfeeds. There would also be the problem of the export debenture on flour.[1]

The tariff rate on flour (also "semolina, crushed or cracked wheat, and similar wheat products not specially provided for") is $1.04 per 100 pounds, representing a "compensatory" rate of 96.4 cents on the assumption that it takes 4.5 bushels of wheat to make a barrel of flour, plus an additional 7.6 cents as a protective supplement assumed to offset lower milling and marketing costs in Canada. In most of the earlier debenture bills, the debenture rate on flour was set at one-half the tariff rate, or 52 cents per 100 pounds. Under the McNary bill the Secretary of the Treasury would be charged with fixing the rate at

[1] Also the possibility of discriminating retaliation on flour, discussed below, p. 339.

"an amount sufficient, as nearly as may be, to equal the debenture that would be issuable upon the exportation of the quantity of the .... [wheat] consumed in the manufacture of the exported .... [flour], as prescribed and promulgated from time to time by the board."[1] The obvious aim is to have a schedule of compensatory rates, drawn up and altered from time to time in an endeavor to preserve their compensatory character.

The strict application of this provision would be far from easy. The actual amount of grain used to make the various kinds of flour varies considerably: it is highest in the best grades of patents, lower in straight flours, and still lower in semolina. For tariff purposes it has been thought impracticable to apply different rates to the several varieties and grades of flour, utilizing different quantities of wheat—straights, patents, cut straights, etc., by-product clears, and offals. Conceivably the debenture rates on flour would be not a single rate, but a schedule of rates. The administration of such a schedule would be troublesome and costly, and open doors to misrepresentation. Even such a schedule, however, could hardly accomplish its real purpose of keeping the flour rates equivalent to debenture rates on wheat, not merely because of the variety of types and classes of flour, but because milling ratios vary from crop to crop and otherwise. Since our present tariff on flour is virtually prohibitive, its simplicity is of no consequence; but the same would not be true of the debenture rate. The debenture rates and changes therein would interject a new factor into milling problems.

If, however, for reasons such as dictated single tariff rates on wheat and flour, and as has been commonly assumed prior to the recent McNary bill, a single debenture rate on flour were established, it might have notable effects on our flour exports. These now include a little patent flour, but mostly straights and clears, or mixtures. It would seem obvious that a single debenture rate, based on 4.7 bushels of wheat per barrel of flour,[2] would yield a special bounty on exports of clears and other low-grade flours, for a barrel of these represents much less than the equivalent of 4.7 bushels of wheat. On the other hand, the rate would not be sufficient to promote export of patent flours, for good patent flours require more than the equivalent of 4.7 bushels of wheat. It might be to the advantage of millers in some regions to export as much coarse flour as they could, utilizing the minimum quantity of wheat. The low-grade flours, of which the exports would be especially stimulated, have little appeal outside of Oriental, Levantine, and other low-grade markets. The export of more representative flours, patents and straights, would be discouraged. Similar unintended consequences have frequently flowed from the establishment of apparently simple tariff rates.

A related point should not be passed over. If, as no one has proposed, flour were a debenturable commodity but wheat were not, a marked stimulus to the export of flour would be given unless nullified by countervailing duties or their equivalent abroad. Also if, as no one has suggested, both wheat and flour were made debenturable, but the debenture rate on wheat were one-half the rate on flour, a considerable though lesser stimulus to flour export would be given. If our previous reasoning is correct, to the effect that somewhat less than the whole of the debenturable rate on wheat would be reflected back to the grower, somewhat the same situation might prevail. The debenture rate on flour would be more than compensatory, for this reason alone, and a portion of the flour debentures would represent an unintended and disguised, but no less real, bounty on flour exports.[3] This would tend to increase our flour exports, and the proportion of wheat exported in the form of flour, provided (and the proviso is important here) no countervailing measures were taken abroad.

We question how fully, under such circumstances, such special bounties on exports of flour, and particularly low-grade flours, would be reflected back to farm prices of wheat. It seems to us that the more indirect and roundabout the process through which the reflection must operate,

[1] See above, p. 303.

[2] This is approximately the average in current American milling experience. See WHEAT STUDIES, December 1927, IV, 92–98, 101.

[3] Cf. the indirect bounties on sugar exports discussed below, pp. 334–36.

the larger would be the prospect that part of the bounty would fail to reach the farmer.

Clearly the milling business and the export of flour would be greatly affected. Millers could doubtless adapt themselves to the debenture system, with its added complications, but they would seek to do so in such a way as to enhance their profits, and with good prospects of so doing. Extension of export markets for flours especially favored by the scheme could doubtless be found, but usually by concessions in price. Conceivably domestic flour, largely patents, would not rise in price as much as anticipated, because of better returns from clears. With millers, foreign consumers, and domestic consumers as potential participants in the bounty, it requires more than a little faith in the efficacy of competition to assume that the full benefit of the debenture on flour would be reflected back to the wheat grower.

Moreover, there is a large actual and potential foreign trade in other products of wheat, such as macaroni and other alimentary pastes, bread, biscuits, crackers, and other baked articles, dutiable at varying rates. In each of these products there are wide variations in the amount of wheat utilized. Upon what basis would the debenture rate be assessed? To grant too low a rate would seriously injure producers of such products, and might, in fact, partially defeat the purposes of the plan by admitting foreign wheat in the form of these products. If too high a rate were granted, it would constitute a bounty to producers, analogous to the indirect sugar bounties mentioned below, and much more likely to be met by retaliatory action by foreign governments than a like debenture upon wheat.

One could easily mention other puzzling aspects of the problem. What is certain is that the effects of the application of the debenture system to wheat and flour would be highly complex and would exert no little influence on business interests involved. What is highly uncertain is the precise nature and extent of this influence and the reflex action upon farm prices of wheat.

Conclusion

With no pretense to having exhausted this phase of the subject, we refrain from going farther because we do not wish to give an exaggerated view of the complications. Yet we cannot escape the inference that the operation of the scheme would not in fact be simple, direct, and undisturbing, but quite the reverse; and we consider it important that the existence of numerous complications should be realized. Experience, or fuller analysis in advance, might well reveal certain inherently beneficial incidental consequences of the plan; but in the main the probable incidental results appear to us either undesirable or neutral.

It is impossible to predict with any assurance, and would be impossible to measure in retrospect, the extent of any failure to reflect the debenture rate back to the grower or, what is more important, the extent to which domestic farm prices were not raised by the operation of the plan, above what they would otherwise have been, to the extent of the debenture rate. But we see no justification for accepting the optimistic reasoning of proponents of the debenture plan. Even in the absence of production stimulus and/or foreign retaliation, it seems to us more probable that the enhancement of farm prices, on the average, would not exceed 15 to 16 cents a bushel, instead of 21 cents. We regard as illusory the expectation that the reflection back to the farmer would be full, uniform, and universal; we should expect it to be incomplete, but to vary greatly in extent from region to region, from wheat to wheat, and from year to year.

Moreover, it must not be forgotten that farmers are consumers as well as producers. Wheat growers consume flour and other products that would be subject to price increases under the debenture plan. There is reason to believe that our sugar tariff yields less financial benefit to growers of sugar cane and sugar beets than it costs American farmers as a whole. As consumers, in consequence of the debenture plan, farmers would presumably pay somewhat higher prices for food, clothing, and tobacco, and probably also for other products that would be affected by higher costs (for materials and wages) resulting from application of the plan. To such an extent, the farmers' gain from higher farm prices would be offset.

In short, the actual results of the operation of the plan with respect to wheat can reasonably be expected to be quite different from the results commonly predicated —even if we disregard possibilities of stimulated production and foreign retaliations. There would, in our opinion, be no uniform raising of prices to growers to the approximate extent of the debenture rate. There is no reason to expect that any growers would gain by more than the debenture rate; there is reason to expect that those who get most will gain no more than 80 to 90 per cent of the debenture rate; there is reason to expect that in the aggregate wheat growers would gain by much less than this amount. Moreover, the system would create regional and local inequalities, benefiting most those regions and farmers that already contribute most of our export wheats. It would interject a factor making for changes in plantings, in uneconomic directions.

III. THE QUESTION OF STIMULUS TO PRODUCTION

In the foregoing discussion we have intentionally left out of account the bearing of the debenture system upon wheat acreage, production, and exports, and in turn upon prices. This important consideration now demands attention. Although it has figured a good deal in discussions of the proposal, there is little evidence that it has been followed through to sound conclusions.

The Effect on Acreage and Production

The natural economic effect of the debenture system would be to stimulate planting of the debenturable crops, to retard any existing tendency to contract acreage and to accentuate any existing tendency to expand acreage. The mere adoption of an avowedly price-raising policy would exert considerable influence in this direction; it would be inferred that, once embarked upon it, the government would seek to carry it through, raising rates if the initial ones failed to yield the desired results. Apart from this psychological influence, the initial enhancement of prices resulting from the plan, and the prospect of continued support to domestic prices under it, would exert a more tangible influence in the same direction.

The extent of the influence on planted acreage cannot be predicted with confidence. It would depend upon a complex of factors. One important factor would be the level of prices before the enhancement. If this were such as to make for reduced plantings and the prospective price improvement appeared moderate, the anticipated benefits might merely offset the tendency to contraction and the stimulus to expansion would be initially slight. On the other hand, if maintenance or expansion of acreage were encouraged by existing prices, the prospect for even a moderate enhancement of price might yield considerable stimulus. From 1924–25 to 1927–28 wheat prices were such as to encourage expansion of planted acreage, and expansion occurred. Wheat prices during the past year or so have tended in the opposite direction. How the acreage would actually change after the application of the plan would be determined in part by prices and acreage conditions existing at that time.

Another important factor would be the extent of price enhancement that was expected to result from the scheme in operation. If the theory of advocates of the debenture plan were generally accepted and wheat growers assumed that they could count upon nearly 21 cents a bushel more for their wheat, an addendum now and in future, as a result of the plan as compared with the absence of it, the stimulus to expansion would be substantial indeed. It would be particularly important in regions in which the tractor and combine are most readily used, with great economies in cost of production. Senator Capper of Kansas said in the Senate on May 4:[1]

> If you put this subsidy into effect we will increase our production of wheat in Kansas, through our use of big power on our level fields, in a way that will give the Treasury plenty of work to do.

It might also be important in the case of durum wheat, of which the harvested acreage has tended sharply upward in spite of moderate or low prices, rising from 3,826,000 acres in 1924 to a peak of 6,711,000

[1] *Congressional Record*, May 4, 1929, p. 874.

acres in 1928.[1] If we are correct in reasoning that the enhancement of price, apart from expansion of production, would be much less than has been ordinarily assumed, the stimulus might be correspondingly less. But in the first year or two it would not be the actual enhancement, as much as expectations of enhancement, that would exert the major influence; and these expectations would be more likely to be optimistic than skeptical or pessimistic.

A third factor, varying with different debenturable products, would be the possibilities for increase in acreage. So far as wheat is concerned, we consider that these possibilities are large. Our planted acreage increased remarkably during the latter part of the war and shortly after, reaching a peak of nearly 77 million acres for the crop of 1919. Subsequent contraction occurred under the influence of unfavorable prices, but only in one year (for the crop of 1924), when planting conditions constituted an important additional factor, has the planted acreage fallen appreciably below 60 million acres, which compares with a prewar *maximum* (crop of 1914) of less than 55 million. For the crop of 1928 the planted acreage has been estimated at 69 million. Newly developed machinery makes for expansion of acreage in three ways: by reducing planting, reaping, and threshing costs; by making it feasible to cultivate wheat on semi-arid lands hitherto unbroken because they were below the margin of profitable cultivation; and by favoring larger wheat acreage per farm. Thus it has led to notable increases in acreage in recent years on the western fringe of the Great Plains wheat belt. There are also widespread possibilities of increasing wheat acreage in the older sections in which wheat is extensively raised. It might be considerable in the large central area where the returns from barley and oats, to some extent also from rye and corn, have been regarded as unsatisfactory. Given a substantial price stimulus, our wheat area could easily and fairly quickly expand considerably above the peak that it reached in 1919; and even a more moderate stimulus could bring it up to this level and beyond.

[1] According to preliminary estimates, the acreage has been sharply reduced in 1929.

Another factor affecting the expansion would be the scope of the debenture plan. If it were applied to wheat alone, and not to products competing for the use of the same land, the stimulus would be especially pronounced. If it were applied generally to all cereals and to other export-surplus crops, and coupled with higher tariffs on flaxseed, sugar, dairy products, and other products, the influence would be less marked. But it seems quite unlikely that either the tariff or the debenture scheme could directly exert any marked influence upon prices and production of hay and oats, which are among the competing crops; and it could hardly affect corn as much as wheat. The net effect of a comprehensive application of the plan would almost certainly be an expansion of the acreage planted to wheat.

The effect on the volume of wheat produced would be exerted only through increase of planted acreage. Conditions determining abandonment of planted acreage, and yields per acre, would be unaffected. Variations in these conditions from year to year would cause, just as at present, considerable variations in the size of crops; but the variations would occur on a higher level because of the operation of the plan.

Another factor would be the extent to which the federal farm board, or wheat cooperatives, could restrain the tendency to increase acreage. They would unquestionably attempt to do so. How far they might succeed no one can tell. It must be admitted that past experience affords no ground for optimism here. The success could hardly be greater than with similar efforts made without resort to the debenture plan. It would probably be less, because the board's position would be in a sense self-inconsistent: with the debenture plan it would be seeking to raise prices, which tend to stimulate production; and by its advice it would seek to prevent this stimulus from taking effect.

We cannot escape the conclusion that a powerful stimulus to acreage and production of wheat would be given by the debenture plan, initially and for a time after. Though hesitating to suggest any figure, we believe that an increase of 10 per cent could easily be reached within three years, and it might be much greater. If we do not prophesy as large an expansion as would some critics of the plan,[1] it is because we do not believe that even the early enhancement of prices would be as great as the advocates of the measure have assumed, and also because we would stress the secondary consequences following from the early expansion of production. To the latter we now turn.

Secondary Consequences on Prices

If now, production were increased, within a comparatively brief period, above what it would otherwise be, let us say, by some 80 to 130 million bushels, our wheat available for export would be increased by, let us say, 100 to 150 million bushels. The effect of this increase on world prices would be too powerful to be overlooked. The international trade in wheat has only recently exceeded 900 million bushels, and net exports recently averaged much less. Prices in international markets are sensitive to the volume offered, in degrees depending upon the level of prices and the size and character of crops in importing countries. An addition of 100 to 150 million bushels to the international market supply would have a materially depressing effect on the world price. Statistical analyses have not yet been perfected so far as to permit close predictions as to price effects. These would certainly vary with the size and distribution of world wheat crops, the volume of export surpluses and the import requirements of major importing countries, and the level of international wheat prices. But a reduction of from 10 to 20 cents a bushel in international market prices, as a result of such an addition to our exports and apart from other influences making prices high or low, would be a not unreasonable expectation.

It could never be proved that such an expansion of production and exports was a response to the debenture stimulus, nor could it be demonstrated that the addition to exports had caused a price difference in world markets of any such extent. The effects would be spread over two or three years, or more, and inextricably mingled with the effects of other forces. But we feel reasonably confident, in the light of our studies of wheat crops, movements, and prices, that a tendency of some such magnitude would be set up by the application of a debenture plan to wheat.

If this be true, whither does it lead us? Clearly to this point, that the reduction in international wheat prices as a result of applying the plan might soon approach, if not actually reach, the price differentials that would be reflected back to farmers by the debenture system, without yielding the growers more than a limited fraction of the anticipated price benefits. What the farmer would really like is higher prices; if the debenture plan failed to yield him this, he could take cold comfort from assurances that the difference between Liverpool prices and his farm price was less than formerly. Quite probably some farmers would retain a net advantage from the operation of the scheme, if it worked as we have suggested; but others might be net losers by it. By and large, the wheat farmers who have found it profitable to expand their operations in recent years would be the ones to gain most, while many of those who have been hard put to it to make ends meet would suffer afresh from the stimulated competition of others, much as they have in recent years; and many who had responded to the stimulus of higher prices would be in serious difficulty.

This result would be disappointing, and otherwise unfortunate. The Treasury receipts would be depleted by larger sums than have been estimated on the basis of past exports, but without substantial benefit to farmers. Efforts to overcome the difficulty by raising debenture rates would lead to repetition of the process, and afford temporary relief, at increased cost to the Treasury, but without yielding any real solution. If the system were continued unchanged, a downward readjustment in acreage (and possibly land values) would tend to ensue. The readjustment would be greater, and more painful, if rates were re-

[1] The opposition to the export debenture on the part of the American Farm Bureau Federation was based in large part on the view that the export debenture would stimulate production more than the equalization fee plan. Professor J. D. Black, a believer in price-raising measures and a qualified endorser of the debenture plan, believes that of all price-raising devices the debenture plan might stimulate production the most; but he thinks that effective checks on expansion could be devised. Cf. his *Agricultural Reform in the United States* (New York, 1929), esp. pp. 311, 264–66.

duced, either for fiscal reasons or through application of a schedule calling for rate reductions in relation to expansion of acreage or production. Abandonment of the system would remove the prop to domestic prices, cause sharp declines toward a level more closely related to world prices, and precipitate a heavier task of readjustment. The stimulus would have been temporary, and the readjustment could be made, but not without considerable cost, falling perhaps more heavily on those less able to bear it.

The magnitude of the injury can be exaggerated, as has been done by some who accept the view of the proponents of the measure that, for a few years at least, farm prices would be raised by roughly the amount of the debenture rate. We do not share President Hoover's apprehension that the plan "would bring American agriculture to disaster," or agree in the emphasis employed in two of his specific points against the plan, which it is pertinent to quote here:

> 3. If the increased price did reflect to the farmer, the plan would stimulate overproduction and thereby increase world supply which would in turn depreciate world prices and consequently decrease the price which the farmer would receive and thereby defeat the plan. Stimulation of production has been the outstanding experience abroad where export subsidy has been applied. Overproduction will defeat the plan and then, upon its withdrawal, agriculture would be plunged into a catastrophe of deflation from overexpanded production. The farmer's difficulties to-day are in some part due to this process after the war.
>
> 4. The stimulation of production of certain commodities would disturb the whole basis of diversification in American agriculture, particularly in the cotton and wheat sections where great progress is now being made toward a more stable basis of agriculture.

It seems to us probable that the expansion of production and export would not go so far, that the plan would not be wholly self-defeating, and that the hopes of price enhancement would not prove wholly illusory. But Secretary Mellon's position, as expressed in the following excerpt, we regard as conservatively true:

> . . . . Exports would be stimulated, and, under the pressure of a consequent decreased domestic supply, domestic prices would rise. This would stimulate increased production. In the meanwhile, increased exports dumped on the world market would depress world prices, thus depriving the producer of the full benefit of the contemplated bounty. There is no doubt, I think, but that the effect of this program would be to depress world prices and to increase domestic prices and to give to the American producer a price higher than he would otherwise obtain, the increase, however, not being by the full amount of the cash bounty. But as production increased in this country under the stimulus of higher domestic prices there would be a constant tendency for the bounty benefit to melt away.

Even upon our moderate expectations of early price enhancement, and of expansion of production and export, the results would be notably smaller than the advocates of the scheme confidently promise. Unless production restraints could be imposed with marked success, the tendency would be for world prices to fall enough so that, even with the differentials that could be secured by American wheat growers in consequence of the scheme, the net gain would be slight.

A Longer View

Even if the early consequences were such as we are disposed to picture them, one must consider a somewhat longer and broader view. Theoretically it would seem reasonable to expect that such reduction in international prices of wheat and flour as we envisage would promote increased wheat consumption abroad, and discourage expansion and lead to contraction of wheat production abroad. No prompt reaction of this sort could be anticipated; but if we firmly adhered to the debenture system and it provoked no foreign retaliation, tendencies of this sort would be set up. If they should work out according to theory, an equilibrium might be reached whereby our net expansion would be largely offset by contraction abroad, to the end that world wheat prices would be reduced by the operation of the system to a net extent of, let us say, only 4 or 5 cents a bushel. In such case, our wheat growers would not be subjected to so considerable readjustment, and a larger net gain would eventually accrue to them as a result of persisting with the plan,[1] although part of their gain would be

[1] Dr. Holbrook Working of our staff is disposed to lay stress upon this view, and thus to think the less unfavorably of the eventual possibilities of the debenture plan.

absorbed by higher costs of production on portions of the increased acreage here.

There is unquestionably much validity to this reasoning, but we cannot follow it to the stated conclusions, essentially for realistic reasons.

The great competitors of the United States in the export of wheat are Canada, Argentina, and Australia. Unlike the United States, whose wheat exports have recently been in large part incidental, these countries are in the business of growing wheat for export, and ship overseas the bulk of their crops. They would presumably fear and probably experience injury in consequence of the application of the debenture plan here. Such depression in world wheat prices as resulted from our expanded production, under the stimulus afforded by the earlier operation of the plan, would be reflected back to their wheat growers in lower farm prices and lower income per acre. The reflection would be much more direct and certain than in the case of the United States, because so large and representative a proportion of the wheat produced in these countries goes abroad. But it is not clear that the result would be to check or to reverse agricultural expansion, specifically in wheat culture, in these countries. Still in the expansive, extractive stage of agriculture, they would be loath to have this expansion restrained. Further, agricultural expansion in Canada, and in large measure in Argentina and Australia as well, is not directly conditioned by operative returns. It is supported by directly or indirectly subsidized immigration, state policies of homesteading, railway settlement policies, the lure of new land, and the prospect of increases in land value. The new power farming is gaining headway in all three countries. For the next few years at least, perhaps for a decade, the wheat acreage of Canada, Argentina, and Australia will hardly respond, in any notable degree, to changes in the world price of wheat that might theoretically be expected to condition the rate of expansion of wheat culture.

We see no grounds for expecting that wheat culture in Russia, or wheat exports from Russia, will be materially affected by such changes in international prices as we have envisaged. Other factors, mainly domestic ones, are of dominant influence there. Even in Hungary, Roumania, and Jugo-Slavia, where lower levels of wheat prices might exert some repressive influence on acreage or export, domestic and regional factors have been largely influential in bringing about expansion of production and consumption without affecting exports *pari passu*. Without fuller knowledge than we possess concerning the factors determining the acreage, production, and export of wheat in these countries, we are unable to appraise the influence that would be exerted by lower world prices. In any event, these countries are, and seem likely to remain for several years, comparatively minor exporters and never net importers. At most, no large weight can be assigned to changes in acreage that the debenture plan might indirectly occasion there.

So far as most wheat-importing countries are concerned, expansion of consumption in line with existing trends is likely to continue, possibly with some acceleration. Those countries that are large producers of wheat, such as Germany, France, Spain, and Italy, seem likely to continue their policy of agricultural protection, and to raise tariff barriers higher as international wheat prices fall. It seems to us improbable that such countries will, in consequence of depression in world prices that might follow our expansion in wheat output, contract their wheat acreage and production materially.

Without going into all the cases, or into any in detail, we are constrained to believe that if even the eventual success of the debenture plan is to rest upon contraction of foreign acreage, or material restraint upon its expansion, it rests upon hope rather than realistic prospects. We do not question that some influence in the direction suggested by the theory would be exerted, but we believe the influence would be weak at least in the calculable future. Accordingly we cannot reckon this longer view as yielding major qualifications of the inferences already reached.

Flexible Rate Provisions

We have not yet mentioned in this discussion the provision for a "check upon overproduction," which was incorporated in several 1928 debenture bills and also, by the Norris amendment, in Section 10 of the McNary bill. This device, in its three more prominent forms, merits examination before we consider the bearing of any such form.

The Ketcham bill of February 6, 1928 (H.R. 10568), contained the following provision (Sec. 7, *d*):

In order to prevent undue stimulation in the production of any debenturable agricultural commodity, whenever the President finds prior to the beginning of a crop year from the report of the board hereinafter provided for or from any other source, that the probable production of any debenturable agricultural commodity during such crop year will exceed the average annual production of such debenturable agricultural commodity for the preceding five years, he shall by proclamation, prescribe that the export debenture rates for the commodity and the debenturable products of such commodity shall be reduced by the percentage fixed in subdivision (e) for the amount of the increase in production which the President finds will occur during such crop year. Such reductions shall become effective on the date fixed in such proclamation, not less than sixty days from the date of the issuance thereof, and shall remain in effect throughout such crop year. At the end of such crop year the export debenture rates for such debenturable agricultural commodity and the debenturable products of such commodity which were in effect immediately prior to the commencement of such crop year, shall become effective again unless the President under the provisions of this Act prescribes a change in such rates. The term "crop year," as used in this subdivision, means a twelve months' period beginning at a time designated by the President.

The schedule of reductions may be condensed as follows:

Estimated increase in production (*Per cent*)	Reduction in debenture rates (*Per cent*)
0–20	0
20–40	20
40–60	50
60–90	75
90 or more	99

To assist the President in determining the necessity for such reductions, the bill required investigation and report by the debenture board, and added that "In the conduct of any such investigation the board shall give reasonable public notice of its hearings and reasonable opportunity to parties interested to be present and to be heard."

Several minor points call for remark. The decision would presumably have to be based upon crop forecasts, made in the case of wheat on the basis of the report as of June 1. Instead of relying upon the official reports of the Crop Estimating Board in the Department of Agriculture, a special investigation with hearings is required. The proclamation would have to be made before the end of June, to apply to wheat, and could not be made or altered within the crop year, even if the harvest belied the forecast. The reduction would cease automatically at the end of the crop year. No reduction would be made unless the crop forecast was at least 20 per cent above the average of the five preceding crops, and the reduction in debenture rates could be only 20 per cent unless the prospective crop was 40 per cent or more above the same five-year average.

Now even a 20 per cent excess over the average of the five preceding crop years would represent a very substantial increase. In the case of wheat such an increase has been equaled or exceeded only three times in the last 35 years—1898, 1914, and 1915—and then only because of an extraordinary conjuncture of rising trend of acreage, record acreage harvested, and high yields per acre. An increase of as much as 40 per cent has not occurred. The extraordinary price stimulus during the war did not result, either in 1918 or in 1919, in a wheat crop as much as 20 per cent above the average of the preceding five years. The average crop of the past five years is calculated at 830.6 million bushels. Had the debenture plan been adopted in April 1928, it would have required, under the schedule given, a forecast crop for 1929 of about 1,000 million bushels to bring a reduction of 20 per cent in the debenture rate, and a forecast crop of 1,163 million to bring a reduction of more than 20 per cent in the rate. Moreover, if the stimulus to production should operate gradually, the average on which the percentage was based would also rise. It is safe to say that a reduction of more than 20 per cent in the debenture rate would probably never occur under this form of the scheme, and that it would be an exceptional year in which any reduction was made. It seems fairly obvious that rate reductions made on such a schedule would be ineffective, either directly or indirectly, in preventing or checking substantial expansion of wheat acreage or output. The market response to enlarged outturn would presumably do much more.

The same schedule, with the same intent, was incorporated in the Norris amendment to the McNary bill; hence most of the above comments are pertinent to the latest form of the debenture proposal.[1]

The Jones bill of February 7, 1928 (H. R. 10656, Sec. 6), included much more flexible provisions, as follows:

(b) Whenever the board finds that conditions justify such action it may reduce any debenture rate prescribed in subdivision (*a*) by an amount not exceeding 50 per centum of such rate, and may at any time after such reduction restore any such rate to any point not exceeding the rates set out in subdivision (*a*).

(c) Whenever the board finds that the acreage planted in the United States during any year of any commodity covered by this Act is materially increased over the average annual acreage planted to such commodity, according to the estimates of the Department of Agriculture, during the five years next preceding such increase, the debenture rates for such commodity for such year shall be reduced by the board, on a percentage basis, in the inverse ratio, as nearly as the board finds practicable, to such acreage increase.

The identical Ketcham and Jones bills of April 11, 1928 (H. R. 12892, 12893) also contained flexible rate provisions which, while less flexible than the ones last quoted, were broader in scope, less cumbersome to put into effect, and more likely to be called into play than those of the earlier Ketcham bill and the McNary bill. To quote from Section 8 of the Ketcham-Jones bills:

(b) In order to prevent undue stimulation of the production of any debenturable agricultural commodity, whenever the board finds that the average annual production of any debenturable livestock commodity or the average annual acreage of any other debenturable agricultural commodity for the last two preceding years has exceeded the average annual production or acreage, respectively, of such commodity for the period from the seventh to the third preceding year—then the board, after publicly declaring its finding, shall prescribe that the export debenture rates for the commodity and the debenturable products thereof shall be reduced or that the issuance of debentures therefor shall be suspended, as hereinafter prescribed for the amount of increase in production or acreage which the board finds has occurred. Any such reduction or suspension shall become effective at the commencement of the next calendar year and shall continue throughout such calendar year. No such reduction or suspension shall be made unless notice thereof is published at least thirty days before the commencement of such calendar year. At the end of such calendar year the export debenture rates which were in effect immediately prior to the commencement thereof shall again become effective unless the board under the provisions of this Act prescribes a change in such rates.

The prescribed schedule, as applicable to wheat, was as follows:

Increase in acreage[2] (*Per cent*)	Reduction in debenture rates (*Per cent*)
0–5	0
5–10	25
10–15	50
15 and over	100

Judging from the past, provisions of this sort would be called into play more frequently and more sharply. The more flexible provisions, however, raise more clearly certain broader considerations. The fear of reductions in debenture rates could hardly be a sufficient deterrent to expansion. Frequent readjustment of rates, down and up, would in itself have undesired incidental effects. Reductions in rates would tend to be made in years of large world production, so that the economic forces making for low prices would be reinforced by the reduction; conversely, rates might be at their maximum when production was less abundant and price more satisfactory. In any event, the instability of prices, and in most cases also the variations in farm incomes, would presumably be intensified.

The dilemma seems impossible to avoid. The less flexible provisions would not be called into play, or if mildly called into play they would exert comparatively little influence in preventing such an expansion of production as would minimize the price-raising objects of the plan. The more flexible provisions would exert somewhat more influence in checking expansion of production, but their application would intensify risks and price fluctuations, with untoward direct consequences; and without entirely

[1] Cf. Senator Capper's speech in the Senate, *Congressional Record*, May 4, 1929, p. 876.

[2] The language does not make clear whether planted or harvested acreage was meant.

eliminating the tendency to stimulate production, with its objectionable consequences, they would tend to eliminate the operation of the plan itself. Conceivably better schedules, varying with different products, could be devised; but we see no prospect that any schedule could be drawn up that would be free from the basic objections just mentioned.

Conclusions

It is beyond the scope of this study to consider other commodities one by one. Each presents peculiarities, and the plan would work better with some, less well with others. Suffice it to say that we believe that wheat is a fair average sample of the possible list of debenturable commodities. We see no prospect that the debenture system, as applied to one, a few, or a long list of commodities, would in fact raise farm prices at once by the amount of the debenture rates. We see no reasonable probability that it would, over a period of years, cause farm prices to stand on a level higher than would otherwise obtain by more than a fraction of the debenture rate. At best, we think it highly improbable that the net gain to farmers would reach two-thirds of the debenture rate, and more probable that it would run one-fourth to one-half of the debenture rate, even if there were no retaliation abroad. It would not, in our opinion, really make the tariff effective, even by half, or yield agriculture the promised equality with industry, or prove, as the National Grange expects, "a sound method of restoring agricultural prosperity in the United States."

We have already adverted to the impossibility of predicting reliably how the plan would actually work, and of appraising its actual results. In concluding this section we must emphasize the point that its reputation might be much better or much worse than accurate appraisal of the facts would justify. Precisely the same comments could be made on the protective tariff.

Even under ordinary conditions, experts have serious difficulty in ascertaining the relative weight of different forces that in combination determine acreage, production, movements, and prices of wheat. The debenture plan would be, not a distinct factor in an otherwise stable situation, but another variable in a complex, confused, and changing situation. At various stages in the operation of the plan, it would probably be judged not by what it had actually done for good or ill, for most of this could not be convincingly demonstrated, but by what actually transpired. If it were inaugurated at a time of low wheat prices and there followed a period of rising prices, the debenture system would be given undue credit for the event, or at least would be reasonably safe from attack. The Canadian Wheat Pool was thus most fortunate in being inaugurated in 1924, when wheat prices recovered sharply from extreme depression. On the other hand, if the scheme were initiated early in a period when prices were otherwise tending to decline, it might suffer undeservedly excessive condemnation for causing the decline.

It seems clear that the short-time operation of the debenture plan might be quite different from the long-time operation, if persisted in. Also, it is clear that the plan would work differently with stable crops and uniform year-after-year world wheat prices than under actual circumstances of widely varying crops and prices. Relative wheat shortage and high world price alternate irregularly with relative glut and low world price, despite an upward trend of wheat production in the world. In a year of relative world shortage of wheat with high price, even if the United States had an exaggerated surplus due to the export debenture, the deterrent price influence of this enlarged surplus would be obscured in the rising world wheat price. Under such circumstances the export debenture would seem to be, and in fact might be, reflected in high degree to producers. In a year of relative world glut of wheat with low price, an exaggerated surplus in the United States due to the export debenture would cause a disproportionate depression of price. Under these circumstances the export debenture would not seem, or indeed tend, to be reflected to producers in high degree. With a series of years of uniformly favorable circumstances, the plan might seem to lead to favorable results; on the other hand, it might be discredited in the first year or two of trial, due to unfortuitous conjuncture of unfavorable circumstances.

In our own analysis we have sought, so far as possible, to envisage the possible and probable consequences of the debenture plan itself. These furnish the principal basis for our inferences as to the outcome. We realize, however, that adoption, continuation, modification, or abandonment of the system might rest largely upon misunderstanding, or upon other and perhaps irrelevant considerations. But we believe that the subject is of sufficient importance to warrant serious efforts to think through the relevant considerations in advance.

IV. THE BEARING OF FOREIGN EXPERIENCE

Spokesmen for the debenture plan have frequently referred to foreign experience with analogous devices, and have given the impression that such experience directly supports their theory as to price-raising effects and benefits to farmers. They have asserted that the plan is "based upon a lot of world experience in making the tariff effective for agriculture," and can be "regarded as a tried system," with "benefit to agriculture in each case." There have indeed been innumerable instances of export bounties and somewhat analogous devices applied to agricultural products by a large number of nations. Without undertaking extensive original research in this field, we have nevertheless looked into the available literature on this subject[1] at least as fully as those who cite it in behalf of the debenture plan appear to have done. This examination leads us to believe that the advocates of the plan have seriously misconstrued the foreign experience.

The German Import Certificate System

The most prominent parallel has been drawn with Germany's import certificate system,[2] which furnished the inspiration for the formulation of the export debenture plan. It was in force in Germany from 1894 to 1914, and was re-established in 1925. A similar system was in vogue in France, from 1850 for grain, and from 1851 to 1888 for iron. Czechoslovakia adopted the German system in 1926, and in the same year Sweden copied it on a more limited scale.[3] The post-war experience has been too short to be of clear-cut significance,[4] but the re-establishment of the system in Germany and its adoption elsewhere speaks in its favor.

In several respects the German import certificate system is quite like the proposed debenture system. Exporters of specified agricultural products of Germany, chiefly cereals and pulses, and specified manufactures thereof (and since April 15, 1928, live hogs and certain pork products), obtain from the Treasury upon exportation negotiable certificates representing a value corresponding to minimum tariff rates on imports of the same commodity. Within a limited period—formerly 6 months or 3 months, now 9 months—from date of issue, these import certificates (*Einfuhrscheine*) may be tendered at par in payment of customs duties on certain imports. Originally, the import certificates granted on the export of wheat or flour were good only for duties on imported wheat, and so with other products; but from 1906 they were tenderable for duties on any one of the same list of unmanufactured products. For some years prior to 1911, under certain regulations, they could be used alternatively to pay purely revenue duties imposed on certain products such as were not produced in Germany (e.g., coffee, cocoa, petroleum).

In form, then, the German import certificates are essentially equivalent to the proposed export debentures, except in a few

[1] A valuable guide to the literature of the subject is given by a recent publication of the U.S. Department of Agriculture: Bureau of Agricultural Economics, *Bounties on Agricultural Products: A Selected Bibliography*, compiled by A. M. Hannay, (mimeographed) July 1927. A convenient summary is given in Josef Grunzel, *Economic Protectionism* (Oxford, 1916), pp. 200–29.

[2] For a somewhat fuller discussion, with references, see J. S. Davis, "The Export Debenture Plan for Aid to Agriculture," in *Quarterly Journal of Economics*, February 1929, XLIII, 263–68.

[3] See House Committee on Agriculture, *Agricultural Relief (Export Debenture Plan) Hearings*, February 10, 1928, Serial E—Part 5, pp. 386–88.

[4] The same may be said of Australia's experiment with unofficial export bounties on butter, under the so-called Paterson plan in force since early in 1926, to which brief reference is made below, pp. 336–37.

particulars. The rates are identical with effective tariff rates, as proposed in the earliest debenture bills, and not lower as proposed in the later bills. They apply to a somewhat smaller list of export products. The certificates are good for a somewhat shorter period. They can be tendered in payment of customs duties on certain products only. In practice the certificates usually sell at only a slight discount, though sometimes it is more than nominal. So far, the similarities between the two systems are more important than the differences.

When, however, we compare the German system and the proposed debenture plan with respect to purpose, conditions of application, and effects, we find some striking contrasts.

The debenture plan is designed to apply here only to products of which the United States produces more or less considerable export surpluses. Germany, however, is a net importer of the products to which the import certificate system is applied. When the plan was adopted she was a net importer of each of these products. During the operation of the system she became a fairly regular net exporter of two (rye and oats), but continued regularly a heavy net importer of the group of products as a whole. This difference, as we shall see, is fundamental.

The purpose of the debenture plan is to raise farm prices of the debenturable products throughout the United States and thereby to contribute substantially to increases in farming income. The German system had and has no such object, but a far more modest one. German agriculture has recently been suffering acute depression, in part from causes peculiar to Germany, in part from the same causes that have caused grave difficulties here. But a German official, in writing recently of the crisis and the measures that have been taken to meet it, makes no mention of the re-establishment of the import certificate system.[1] The system was intended to correct a regional discrimination that happened to result from the enforcement of high protective duties on agricultural products; and to prevent certain avoidable and costly disturbances to the grain trade that were caused by the import duties.

A brief explanation should make this clear. As a whole Germany produces less grain and, indeed, of most agricultural products, than she consumes. For military and other reasons, Germany has sought at different times, by various means, to check a tendency to become predominantly an urban, industrial nation, increasingly dependent on imports of foodstuffs. Hence the adoption of an agrarian protective policy in 1879 and its extension and persistence in subsequent years. But northeastern Germany is predominantly agricultural, with a regional surplus of grain and other farm products. For much of this surplus the best markets lay abroad, chiefly in Great Britain and Scandinavian countries. Shipment costs via the Baltic Sea were lower to these markets than to western, central, and southern Germany by rail or water. Furthermore, the wheat of this region was of such a character (low in gluten content) that it was more in demand abroad than in the rest of Germany, which produces somewhat similar soft wheat. To be utilized to best advantage it had to be mixed with hard wheats. The business of mixing this German wheat with Russian wheat, for export, had long been a profitable enterprise in German Baltic ports; today such grain can be mixed with Canadian wheat in British and North European centers. When the tariff duties were imposed, they were effective in raising prices of these farm products in most of Germany, practically to the full amount of the duty. But the east German farmers did not gain nearly as much. Shipped westward within Germany, their surplus had to bear heavy costs of transportation and a special discount for quality. Nevertheless they found it more profitable to accept a moderate increase in price for domestic sale in preference to export prices. Hence the mixing business and the export trade shrank severely, and protests of merchants and shipping interests reinforced complaints of discrimination from the politically powerful landlords (*Junkers*).

The system was designed to remove this discrimination and to permit the restora-

[1] Dr. R. E. Bose, "Aid to German Agriculture," in *The Annals*, March 1929, CLXII, 361–66.

tion of trade to its usual course. Baltic exporters, receiving import certificates, could bid higher for the grain in question, and still make normal profits on mixing and export.[1] The farmers of the region could get virtually the equivalent of the export price plus the duty, and thus secure as much benefit from the composite system as farmers elsewhere in Germany obtained simply from the tariff. German milling interests generally preferred to use more of imported hard wheats, and to let much of eastern Germany's surplus go to foreign markets. Broadly speaking, the device worked as anticipated, and met with general approval, not as an independent policy on behalf of German agriculture, but as a minor complement of the tariff system that prevented needless discrimination and disturbance to trade. It cost the Treasury little or nothing, because imports increased by practically the amount of the exports, and the customs revenues were not demonstrably reduced. It has apparently provoked no retaliation abroad.

Now the debenture plan is not here proposed as a correction of regional discriminations or uneconomical disturbances to trade consequent upon existing duties on agricultural products. Indeed, as we have already seen, it would itself introduce certain regional discriminations in agriculture, and these not in economic directions. Whereas the German system is regarded as part of a protective policy designed to stimulate Germany's production of agricultural products, the debenture plan is designed to make farmers more prosperous without stimulating production. Indeed, it is presented as a measure of surplus *control*,[2] and increase of production is regarded, not as a good to be attained, but as an evil to be guarded against. In practice, when the German certificates were made interchangeable after 1906, the system operated to stimulate production of rye and oats, somewhat at the expense of wheat and barley, with the result that Germany (in part from other causes) became ordinarily a net exporter of rye and oats and a larger net importer of wheat and barley. This experience tends to strengthen the prospect, already mentioned, that the debenture plan would lead to a readjustment in the relative volume of farm products, not necessarily in the interests of the national economy of the United States.

Granting the success of the German scheme in achieving its objects without significant disadvantages, it does not follow that the debenture plan, if adopted here, would achieve its ends. No one claims for the German system the credit for achieving such objects as lie in the minds of proponents of the debenture system. If the means adopted are similar, the differences in aims and conditions of application are of outstanding importance.

It is conceivable that we might adopt the German import certificate system as such, with eventual advantage to our national economy. In effect, the German grain trade is permitted to bring in a bushel of hard wheat duty-free as a stand-off to the export of a bushel of domestic soft wheat or a larger amount of rye or barley. The United States, as we have seen, is ordinarily an exporter of Pacific wheat, hard winter wheat, durum spring wheat, and of rye. We are practically on a domestic basis for high-grade hard spring wheat, and each year witnesses the importation of a small amount of Canadian hard spring wheat for domestic consumption. If we really wish to apply the German system of import certificates here, we should grant to exporters of soft wheat, hard winter wheat, durum wheat, and rye, certificates entitling the bearer to import duty-free a corresponding volume of Canadian hard spring wheat. This would tend to correct an effective discrimination whereby growers of hard spring wheat now get the lion's share of the benefit from the tariff on wheat, while many growers, in many regions, gain nothing from it at all. Such a policy might be expected to simplify milling problems and make possible a more economical disposition of our grain supplies and in time, indeed, a more effective utilization of our national agricultural resources. But in our circumstances as a net exporter it would largely eliminate such benefits as the wheat tariff yields to northwestern farmers, and involve radical readjustments in agriculture

[1] Since the war, which cut off imports of Russian wheat, the mixing business has not revived, for lack of wheat supplies from Russia.

[2] See below, pp. 341–42.

of our northwestern states. We cannot believe that such a proposal would be acceptable to farmer spokesmen. But we suggest that if this more direct analogy were fully appreciated, Germany's experience with import certificates would be less frequently quoted in support of an American export debenture plan.

English Grain Export Bounties

English experience with export bounties on grain is also cited on behalf of the debenture plan. Though unfortunately too little is authoritatively known concerning its real influence on English agriculture, some discussion of the system is pertinent here.

The first "corn bounty" legislation, long forgotten until its discovery a few years ago, was passed in 1673 and expired by limitation after having been in force about five years.[1] It provided for payments of specified cash bounties on the export of wheat, rye, barley, and malt, in ground or unground form, whenever port prices should stand at or below stated levels (and not when they stood higher), as follows:

	Wheat	Rye	Barley or malt
Price in port, per quarter of 480 lbs.	48*s.*	32*s.*	24*s.*
Bounty per quarter	5*s.*	3*s.* 6*d.*	2*s.* 6*d.*

This provision was inconspicuously inserted near the end of a long statute which granted a large subsidy to the crown. Its object was put thus:

> And to the end that all Owners of Land whereupon this Taxe [direct tax of £1,238,750 to be raised within 18 months] principally lyeth may be the better enabled to pay the same by rendering the labours of the husbandmen in raising corne and graine more valuable by exportation of the same into forreigne parts which now is already at a very low rate and that the Nation in generall may have her stocke increased by the returns thereof. . . . .

It was designed to raise domestic grain prices and enhance farming profits, not as a measure of restoring agricultural prosperity, but in order that the landowners might be better able to meet a new direct tax. It was also intended to expand grain exports, and thereby to attract imports of precious metals, to which the mercantilistic doctrines of the period attached large and unmerited importance. It was intended, like the new tax, to be temporary. It was to be effective only if and when domestic prices stood below certain levels. Moreover, it was engrafted upon an ancient and complex system of regulation of the grain trade, domestic and international, adopted with a view to stimulating production, limiting price fluctuations, and ensuring the nation's food supply. The contrasts with the debenture plan are obvious.

The detailed consequences of the measure are not known, and the historian of the act admits inability to appraise its full significance. He finds, however, that grain exports, which had long been small, increased greatly, in part because of the stimulus to export and production afforded by the bounty; and that "the drain upon the treasury was considerable and came at an inopportune moment."

The policy lapsed for a decade, but in 1689 virtually the same provisions were enacted afresh, without limitation of time, and the preamble recites that experience had demonstrated the success of such a measure in achieving stated objectives. The corn bounty policy remained nominally in force until 1814. It was modified from time to time, suspended seventeen times between 1698 and 1773 when dearth was anticipated, and inoperative under its own limitations for most of the last 50 years before its repeal, as England ceased to be a net exporter of grain.

During much of its history the corn bounty system was the subject of much controversy, and neither contemporary nor later writers have agreed in their interpretation of the results. Two great English economists, Adam Smith in his *Wealth of Nations*,[2] and David Ricardo in his *Principles of Political Economy*,[3] condemned the system with emphasis, but on the basis of different interpretations of its results. Later economists and economic historians have not agreed upon authoritative answers to questions that we should like to ask about

[1] See N. S. B. Gras, *The Evolution of the English Corn Market from the Twelfth to the Eighteenth Century* (Cambridge, Mass., 1915), pp. 112–14, 144–47, 245, 253–54, 418–20.

[2] Third edition, Book IV, Chapters 1–8, especially Chapter 5.

[3] Chapters 22, 23.

it.[1] Grain production certainly increased during the bounty régime, but improvements in agriculture and an unusual preponderance of favorable seasons contributed largely to this result, and how much was the result of the bounty stimulus cannot be ascertained. Thorold Rogers, author of a monumental *History of Agriculture and Prices in England*,[2] says:

> The bounty system of the Revolution [1689] was in principle quite as indefensible as the corn law of the Restoration; but it tended to defeat its own ends by extending the area of cultivation, and I have little doubt that much of the plenty which characterised the first half of the eighteenth century was due to the bounty on exported corn [grain], and to gambling for the bounty.

Even so, England ceased to be a regular net exporter of grain after about 1765, and a net exporter at all some twenty-five years later.

Whether because of or merely in spite of the policy, English grain prices ran low until England's consumption came to exceed her production; indeed, about as low as in France, where export was prohibited. Some careful students have concluded that the system furnished a material stimulus to production, promoted the exports of especially the poorer qualities of grain, and cost the treasury considerable sums, but did not cause material injury to consumers because the direct tendency to raise prices was offset by increased output, and when prices rose above a certain point the bounty was withdrawn. Conceivably it may have tended, as it was applied, to mitigate the extreme variations in prices from year to year which had been an evil characteristic of the English grain trade. Whether grain prices would have averaged lower if the bounty system had not been in force cannot be ascertained; but there is no indication that they were permanently held above what they would otherwise have been, by anything like the extent of the bounty, if at all. How much the English farmers and landowners really gained by it is not clear; but it certainly did not ensure continuous agricultural prosperity or prevent complaints of "ruinous prices" of the farm products that were subject to the bounty.

If it is difficult to learn the true significance of the English grain bounties for the national economy, and particularly England's agriculture, it is at least equally difficult to draw reliable inferences concerning the meaning of this experience for the United States in connection with the proposed debenture plan. Certainly the conditions are widely different as to agriculture, grain merchandising, foreign trade, and economic relations in general. The export debenture plan is significantly different in being applicable regardless of price, and in practice it would presumably intensify price instability instead of moderating it.[3] So far as any inferences are warranted, however, they seem to us on the whole to confirm rather than to refute the reasoning we have set forth as to the probable operation of the debenture plan.

Sugar Bounties

Next to the English corn bounties, much more widespread, and much more recent, the sugar bounties of the second half of the nineteenth century constitute easily the most prominent application of export bounties to any agricultural product.[4] These first grew up indirectly in connection with efforts to collect taxes on sugar

[1] Cf. J. S. Nicholson, *The History of the English Corn Laws* (London, 1904), *passim*.

[2] The full title includes the words, *From the Year After the Oxford Parliament (1259) to the Commencement of the Continental War (1793)*....by James E. Thorold Rogers (7 vols. in 8, Oxford, 1866–1902). The passage quoted is in Vol. V, p. 784.

[3] See below, pp. 342–43.

[4] Cf. Josef Grunzel, *Economic Protectionism* (Oxford, 1916), pp. 207–13. For other extensive literature see the bibliography cited above, p. 330. The following paragraph in Secretary Mellon's letter of April 19, 1929, to Senator McNary contains some truth but is not altogether accurate:

"The experience of European countries with bounties on sugar may be of interest in connection with this proposal for a bounty on American agricultural products. The original purpose of the foreign bounties was to stimulate production rather than to increase the income of the agricultural population. A cash bounty was paid the producers of sugar and the results desired were obtained. In Germany it was planned to cover the costs of the production bounty on sugar by collections from an internal-revenue tax on the domestic consumption of sugar, but production increased so far out of proportion to the domestic consumption that within a comparatively few years the net effect was not to produce revenue. Some time thereafter the sugar bounties so far exceeded the revenue from the sugar tax that the treasury sustained a considerable loss, while sugar was being sold abroad at considerably less than the domestic price, and somewhat less than the actual cost of production. Consequently, the bounties on such sugar production had to be removed. There were no limits to production in the granting of such bounties."

consumption, coupled with a policy of refunding the tax in case of exportation. Taxes were levied, for reasons of administrative convenience, on the beets or the sap on the basis of an assumed percentage of yield. The refund upon exportation of sugar was made on the same assumption. In consequence, producers who obtained better yields were able to get a concealed export bounty varying with their technical efficiency. Though not established for the benefit of agriculture, the bounty system promoted the expansion of sugar beet cultivation, beet sugar production, and sugar exports. Hence, although it cost national treasuries heavily, it could not easily be abandoned. To simplify the system and prevent discriminations, the refund of duty was supplanted in several countries (e.g. Austria-Hungary, 1888; Germany, 1891; France, 1897) by outright export bounties.

The policy succeeded in maintaining higher prices for sugar in the producing countries than in their foreign markets, but the results were by no means satisfactory. National treasuries suffered net losses. Production was overstimulated and sugar prices fell, partly in consequence of increased production of cane sugar abroad, to what were regarded as levels ruinous to beet growers. Foreign manufacturers of products containing sugar were given the advantage of getting the raw material at prices below cost of production. Numerous international complications arose and retaliations were provoked. Only the firm adherence to free-trade principles and to a strict interpretation of its commercial treaties prevented the British government from imposing countervailing duties, as favored by her sugar-producing colonies and proposed, for example, by a Parliamentary investigating commission that reported in 1880. The United States, by the McKinley Tariff Act of 1890, offered bounties to American sugar producers on the one hand, and on the other imposed tariff duties on "bounty-fed" sugar produced abroad. The Wilson Tariff Act of 1894, which abolished our bounty and restored tariff duties for revenue purposes, placed a uniform supertax of 1 mill per pound on imported sugar on which the producing country had paid a bounty, either direct or indirect. The Dingley Tariff Act of 1897 required the levy of countervailing duties equivalent to such bounties, as determined by the Secretary of the Treasury. With respect to sugar imported into India, Great Britain went still farther in 1899. Finally, after repeated negotiations and conferences had failed to bring about the abolition of the system, the Balfour Government of Great Britain announced that it would impose equalizing duties unless an agreement were reached for removal of the bounties and reduction in sugar import duties. This forced the adoption in 1903 of the international Brussels Sugar Convention, drawn up in March 1902, which bound the contracting countries to remove all bounties on sugar production or export, direct or indirect; to reduce import duties on sugar; and to levy countervailing duties on sugar coming from other countries in which such bounties were paid. The agreement was not universally subscribed to, and by subsequent action the Convention was variously modified; but the extensive sugar bounty system has never been restored.

For reasons that will probably be obvious, the sugar bounty experience has been accorded no emphasis by the advocates of the debenture plan, in spite of its pertinence. It is hard to believe that they could point with satisfaction to the cost to national treasuries, the excessive stimulus to production, the subsequent depression of prices to growers, the effective aid to foreign manufacturers, the disturbance to production and international trade, the international complications, the difficulty of abandoning practices once they were firmly established, and the final abolition of the system with inevitably difficult readjustments. We would not exaggerate. Doubtless the sugar bounties were far from being wholly evil, and accomplished some good. The debenture plan is not a precise equivalent. But taken as a whole this group of foreign experience fairly constitutes a warning, not a favorable example.

In the light of the foregoing discussion, it seems to us reasonably clear that a serious misinterpretation of foreign experience with import certificates, export bounties, and like devices is involved in arguing that such experience shows that the proposed debenture plan would restore and maintain agricultural prosperity in the United States. No country has adopted a plan of such broad scope, with corresponding limitations, under anything like comparable conditions, or with any such far-reaching purpose. The success of somewhat analogous schemes abroad has been far from unequivocal, even in attaining their particular objectives; and some have given rise to serious undesired complications. We are not ready to conclude, on the basis of limited study, that recorded foreign experience implies that the debenture plan would be a mild or disastrous failure; but we believe that it tends to bear out rather than to contradict our reasoning as to the probable outcome of the debenture system if it should be put into operation.

V. POTENTIAL REACTIONS OF FOREIGN GOVERNMENTS

The international complications and retaliatory actions aroused by the sugar bounties lead naturally to the question whether the debenture plan, if applied, might not provoke similar reactions. Thus far, in considering how the plan might work, we have assumed that foreign governments would take no notice of it, regard it as a purely domestic concern of ours, raise no objection, or at least take no positive steps of resistance or reprisal. The proponents of the plan commonly assume, and sometimes argue, that this situation would prevail. As it happens, one of the more important reasons why the debenture form has been favored instead of a cash bounty is that it would be less liable to arouse criticism abroad. It does not appear that the German certificate system has evoked significant complaint or any resistance in foreign countries. Would the debenture plan, drafted on the same model, do more? On this point again we cannot prophesy with assurance. But it is essential to consider the possibilities and probabilities, and their bearing upon the success of the scheme.

Possible Forms of Reprisal

Governmental retaliation might take any one of three principal forms: (1) imposition of countervailing or "equalizing" duties on the "bounty-fed articles"; (2) application of anti-dumping legislation; (3) raising duties or imposing other restrictions upon our exports, including other articles than those subject to the debenture plan.[1]

[1] Senator Smoot considered this matter at some length in a speech in the Senate on April 30, 1929, which furnishes part of the basis for the following discussion. See *Congressional Record*, May 1, 1929, pp. 736–43.

The anti-bounty legislation may be illustrated by Section 303 of our tariff law (1922), which embodies a policy first adopted in the McKinley tariff of 1890 and incorporated essentially in the present form in the Dingley tariff of 1897 and subsequent tariff acts. It runs as follows:

> That whenever any country, dependency, colony, province, or other political subdivision of government, person, partnership, association, cartel, or corporation shall pay or bestow, directly or indirectly, any bounty or grant upon the manufacture or production or export of any article or merchandise manufactured or produced in such country, dependency, colony, province, or other political subdivision of government, and such article or merchandise is dutiable under the provisions of this Act, then upon the importation of any such article or merchandise into the United States, whether the same shall be imported directly from the country of production or otherwise, and whether such article or merchandise is imported in the same condition as when exported from the country of production or has been changed in condition by remanufacture or otherwise, there shall be levied and paid, in all such cases, in addition to the duties otherwise imposed by the Act, an additional duty equal to the net amount of such bounty or grant, however the same be paid or bestowed. The net amount of all such bounties or grants shall be from time to time ascertained, determined, and declared by the Secretary of the Treasury, who shall make all needful regulations for the identification of such articles and merchandise and for the assessment and collection of such additional duties.

It will be observed that the Secretary of the Treasury is not merely authorized but required to act in such cases. As we have already noted, such action was taken by the United States in the case of sugar bounties, direct or indirect. Within the past three years, when Australian butter producers adopted the Paterson plan under which an export bonus was paid on butter exports (not from the Commonwealth Treasury, but out of a levy upon producers, and even without any legislative authorization), a countervailing duty on Australian butter was established by the United States. Even Canada, a sister of Australia in the British "Commonwealth of Nations," did likewise. There would seem to be no question that the adoption of the debenture plan by a foreign nation would lead to prompt action here under existing legislation. We should therefore have no official ground for complaint in case any or all foreign governments met our debenture plan in the same way.

The existing tariff laws of several other nations contain provisions more or less similar, though most of them are less explicit, and some do not make administrative action mandatory. Senator Smoot, in a recent speech in the Senate, presented quotations or translations of such provisions in force in Austria, Belgium, Czechoslovakia, France, Portugal, Spain, and Switzerland, and in Japan, Australia, New Zealand, and the Union of South Africa.[1]

If countervailing duties were universally imposed on our exports of debenturable products, it is fairly obvious that the plan would fail of its purpose for this reason alone. The exporters would get their debentures on exports of debenturable goods, but they would not be able to sell these goods abroad for as much as if the plan did not exist. In competition abroad with goods from other export sources, our exports would be subject to special import duties equal to the debenture rate. Importers therefore could afford to buy them only at a c.i.f. cost below the cost of competing goods to the extent of the special duty. American exporters could therefore afford to buy these goods in this country at no higher price than if the debenture scheme were not in operation. The farmer's selling price would not be raised. In addition, our Treasury would lose the amount of the debenture issues, while foreign treasuries would gain correspondingly. Not only would the plan fail to afford farm relief, but there would be no offset to the Treasury loss. The result would be humiliating and expensive failure. Indeed, if such policies were generally adopted abroad, the system would have no chance to operate at all.

In the second place, either in connection with provisions of the type just mentioned or independent of them, anti-dumping legislation exists under which duties may be raised to prevent the "unfair competition" from imported goods sold for export at prices below those prevailing in the producing country. The Department of Commerce, in its recent memorandum on the debenture plan, stated:[2]

> It should be pointed out that practically all countries, with two or three exceptions, have antidumping laws. It is possible the debenture plan would be interpreted as an export bounty and export dumping, since products would be sold in foreign countries at lower prices than in this country.

Examples are given in Senator Smoot's speech already mentioned,[3] chiefly from British dominions. President Hoover evidently referred to both types of reprisal in his eighth point against the debenture plan:

> Export bounties are recognized by many nations as one form of dumping. I am advised that a similar action by another nation would be construed as a violation of our own laws. Such laws are in force in the principal countries of our export markets and to protect their own agriculture would probably lead to action which would nullify the subsidy given by us.

The probabilities of the case we shall shortly consider; but it must be remarked here that existing legislation and practice abroad does not necessarily set limits to possible action. Extension and strengthening of present statutes and regulations are readily conceivable.

In the third place, there is the possibility that countries which do not import such products as we may classify as debenturable, but which export competitive products themselves, would seek to meet our measure in one way or another. Last May, when American railroads reduced export rates on wheat and flour, ostensibly in an effort to "assist in effecting a reduction of the surplus through exportation to avert, if possible, a lowering of prices,"[4] the Canadian railways forthwith announced com-

[1] *Congressional Record*, May 1, 1929, pp. 739–40.

[2] *Ibid.*, April 22, 1929, p. 287.

[3] *Ibid.*, May 1, 1929, pp. 740–41.

[4] Approved by the Interstate Commerce Commission to be effective from May 29 to September 30, 1929. See *E. B. Boyd's Export Freight Tariff No. 203*, issued by E. B. Boyd, Agent, Chicago, Ill.

parable rate reductions. Argentina has vigorously protested against our tariff legislation affecting her exports of corn and meats, and might conceivably meet the adoption of the debenture plan, as tending to affect adversely her exports of grain and meats, by raising duties on products that we export to her. Countries that foresaw or experienced real or apparent injury to their trade or agriculture might undertake to strike back in whatever way seemed most likely to be effective. Our own resistance to foreign government measures designed to raise or hold up prices of coffee and rubber furnishes precedents, as well as illustrations of indirect means of action.

Probable Reactions

We are thus led to admit the proposition voiced by Senator Vandenberg, that "as a practical affair . . . . the export bounty can work only by the sufferance of foreign governments."[1] It would be rash to assume, however, that retaliation or reprisal, direct or indirect, would be universal, or even so general as to nullify the intent of the plan. We can hardly follow Secretary Mellon in his view of the probable outcome, as expressed in his recent letter to Senator McNary:[2]

> Moreover, it is hardly to be assumed that foreign countries with important agricultural interests to protect will permit their producers to be subjected to a price war subsidized from the United States Treasury without adopting protective measures. It is highly probable, therefore, that they will levy countervailing tariff rates equal in amount to our export bounty, thus entirely nullifying the effect of the latter as an aid to our producers and drawing the amount of the bounty funds into their own treasur[i]es. The United States was one of the first nations to place countervailing duties against the bounty-produced sugars of the various European countries.

In the first place, it is quite improbable that operation under the plan would be interpreted as "a price war subsidized from the United States Treasury." This is certainly remote from the intentions of proponents of the plan, who have usually reasoned, indeed, as if export prices would be unaffected by it. Any reductions that might take place in export prices would be quite as contrary to the desires of American farmers, or advocates of the debenture plan, as to the desires of farmers abroad. Probably the fact that the measure does not seek to stimulate production or exports, but merely to improve the position of American farmers, would have some mollifying influence on foreign governments who would be aroused by a bounty imposed with the object of stimulating production.

But the intent would not wholly determine the issue. Fears might be as influential as more tangible facts. Sentiment would play a large rôle. The results would count also, and we have good reason to believe that the tendency of the measure would be to stimulate production and exports, and to lower world prices of the debenturable products. The course of actual developments would be important, whether or not the plan was properly chargeable with what proved to happen. Reprisals would be far more likely if our exports did expand materially, than if no noticeable change occurred. If world prices of the products concerned should move up, retaliation would be less likely than if they should decline, whatever the cause of the shift in level. The greater the early success of the plan in raising prices and stimulating production here, the greater would be the tendency to defensive action abroad.

Many countries that import considerable quantities of our wheat, flour, and other agricultural products, indeed, would find insufficient motive for retaliation.[3] A few, like Great Britain (in the past, if not so clearly in the present), are so deeply committed to free-trade policies, which they are most reluctant to modify, that they would avoid retaliatory action even under great pressure. Others, like Great Britain again, welcome cheap food, even if it appears to injure their own farmers. Many would doubtless hope, with good reason, to share with American farmers the benefit of the policy, by obtaining agricultural imports at lower prices as a result of the operation of the plan. European cities would not resent lower prices for wheat, and countries with large industrial populations would be loath to take measures to

[1] *Congressional Record*, May 1, 1929, p. 742.

[2] *Ibid.*, April 22, 1929, p. 285.

[3] Cf. Senator Simmons' remarks in *Ibid.*, April 30, 1929, pp. 667–68.

prevent reduction in costs of living. Industrial interests and organized labor abroad might well oppose a reprisal policy on the ground that, in so far as the debenture system was effective, it would favor their interests in industrial competition with the United States, by raising American costs of living and production costs, while lowering corresponding costs abroad. Some countries, moreover, would deem the measure no threat to any domestic interest, agrarian or industrial. It is quite possible that the larger part of our flour exports, in particular those which go to ex-European countries with inconsiderable cereal and milling industries, would be unaffected by retaliatory measures. Broadly speaking, anti-bounty and anti-dumping measures have not been extensively applied, even under considerable provocation,[1] except in the special case of imposition of depreciated-currency surtaxes since the Great War; but two reasons for this have been the difficulty of ascertaining the existence of dumping, and the limited resort to production and export bounties in recent years.

It is highly probable, however, that there would be some retaliatory action, not only by importing countries, but by competing exporting countries. It might easily reach considerable dimensions. Germany, France, and Italy are earnestly pursuing policies of agrarian protection, and regard domestic wheat growing with notable solicitude, partly for reasons of national defense. Their wheat and flour tariffs are now very high. If our debenture plan were appraised as a measure tending to lower their domestic wheat prices, it might appear to them natural and appropriate to levy countervailing duties.

The prospect of similar action by Great Britain is by no means to be dismissed. British policy in such matters is subject to notable influence from her leading dominions, which have already secured certain preferences in the British import trade. Canada and Australia are heavily interested in growing and milling wheat, and in exporting wheat and flour. It seems probable that they would see in our debenture policy a government-stimulated competition with their wheat and flour (and other farm products also) in world markets, with consequent injury to their agricultural and export industries. If so, they might well seek to have Great Britain impose countervailing duties, as the form of pressure most likely to limit their injury from the plan in operation. Any British Government would take such a step with reluctance, both for reasons of tradition and for fear of injuring Anglo-American relations. But it would find it more difficult to refuse to act than in the case of sugar bounties; and such action would doubtless be supported by British agrarian interests.

One possible eventuality deserves special mention. Several countries that are net importers of wheat and flour have domestic milling industries. It is the prevailing practice of such countries to impose relatively higher duties on flour than on wheat grain. Some such countries might not yield to agrarian pressure to impose countervailing duties on American wheat, but might impose such duties on American flour. This policy would be disastrous to such flour trade as we have with these countries. Our millers would find the higher domestic price on their wheat offset by debentures on the export of flour, possibly more, but only to meet a special barrier at the customhouses of the importing country. Flour importers would demand price concessions corresponding roughly to the amount of the special duty; and American millers would be hard put to it to grant them. The volume of trade thus affected might not be large in the aggregate, for most of our flour exports go to countries which have no important milling industries; but it is by no means a negligible trade from the standpoint of volume or profits.

Limited or sporadic retaliation could significantly and disadvantageously alter the course of our trade. If Germany should retaliate on flour and pork products but not on cotton, and France and Italy on wheat and flour but not on tobacco and cotton, if Argentina should raise duties on American machinery, and if similar selective discrimination should be put in practice elsewhere, the debenture plan might not be wholly nullified but the limited gains would be bought at appreciable real cost.

[1] Cf. Jacob Viner, *A Memorandum on Dumping* (Submitted to the Preparatory Committee for the International Economic Conference), League of Nations, Geneva, 1926.

Our international relations, commercial and otherwise, would almost certainly be affected adversely.

Even if no direct reprisal resulted, it might happen that lowering of international prices, under the operation and in consequence of the plan, would lead to higher import duties in certain foreign markets. It is worthy of remark that recently Italy, France, and Germany raised their import tariffs on wheat and flour, almost simultaneously with the reduction in export freight rates here and in Canada. Such a reaction, however, would affect us no more than other exporting countries.

With respect to the probability of foreign reprisals, it is well to observe a change in the attitude of the world toward artificial devices affecting international trade. Before the war, when one country proposed an action calculated to influence the trade with another, the diplomatic and legislative reactions were largely in response to the influence of the parties directly interested. Since the war, however, the subject of trade barriers has been raised from a strictly commercial position to one with larger bearings. It is not too much to say that the movement in the direction of lowering trade barriers has assumed almost the position of a political religion in Europe, and efforts in the direction of increasing trade barriers or disturbing trade relations are regarded as menaces to international amity. Under these circumstances, it is more than possible that political action of other countries against such a procedure as the export debenture, while instigated by the directly interested parties, would be supported by classes not directly interested, on broad grounds of economic and political convictions. Under such circumstances, reprisals might be provoked even if they were ill-advised on narrowly economic grounds.

In advance of experience with the debenture plan it is impossible to make accurate predictions as to the extent of foreign retaliation and its reflex influence. Conceivably the reaction would be less than in the case of outright bounties, but it is hard to believe that the thin disguise that the debenture plan would wear would seriously modify such reactions as undisguised bounties would provoke. The reaction could be expected to be much more pronounced than in the case of the dumping of manufactured products, which is difficult to detect and measure. It is quite improbable that the reactions would be so general as independently to defeat the aims of the debenture plan. But it is highly probable that there would be sufficient retaliation to reduce the real benefits below, and probably substantially below, those calculable on the assumption of a benevolent attitude on the part of foreign nations, and to modify the course of trade in ways adverse to American exporters of agricultural and other commodities. It is also hard to believe that the plan would not injure our good-will abroad in ways less tangible but no less important. It would almost unquestionably affect our own international policies. To be consistent, we should have to repeal Section 303 of our tariff law, and modify our expressed attitude toward measures taken abroad, in the interests of producers, that have been construed as contrary to our national interests.

Possible Imitation Abroad

Another type of possible reaction abroad may be mentioned in concluding this section. Agricultural difficulties and agrarian discontent are by no means confined to the United States; they prevail in a great many countries. If the debenture plan is a sound measure of national policy for the United States to adopt, it should be extensively copied abroad. Even if the debenture plan were not really well-advised in our own interest, if we adopted it and continued to prosper under it there would be a tendency to adopt it elsewhere. Unquestionably our example in maintaining highly protectionist tariffs, and our prosperity under them—regardless of whether the prosperity is or is not really due to the tariffs—has been influential toward higher tariffs generally.

Now it is impossible to conceive of the extended adoption of the system without some such results as were experienced with sugar bounties — general overproduction, serious disturbances to industry and trade, heavy cost to national treasuries, and eventual injury to agriculture itself. Whatever advantages it might yield to our farmers if we alone tried it, these benefits would certainly be reduced or perhaps nullified if it were extensively imitated abroad. Under our present laws our Treasury would have no choice but to impose countervailing duties on foreign products exported under the system, and governments otherwise disinterested would be pressed to meet reprisal with reprisal. An international agreement to end the system would probably be called for.

Here the contrast with Germany's import certificate system is important. It has created no serious complications, at home or abroad, because Germany exports no large volume of any of the products affected, and is a net importer of the group of products to which the system applies. Under it Germany exports more of certain types of grain, from certain regions, than she would otherwise do; and imports from abroad, to other regions of Germany, more of other types. The system tends to remove obstacles to the economic flow and utilization of goods, not to set up new currents uneconomic in character. If we really undertook to apply the German system to farm products of which we are net importers, Germany's satisfactory experience with it might be duplicated here. But in the proposed conditions of its application, the debenture plan is a horse of entirely different color.

It may well be that we can afford, far more easily than most nations, to make costly experiments in the effort to improve the status of farmers. Surely, however, it is sounder policy to make such experiments as would promise, if they succeed, to be applicable elsewhere without reacting adversely upon us. We are entering upon such an experiment with our federal farm board under the Agricultural Marketing Act. Reasonably applied, it should injure none but ourselves if it fails; and if it succeeds it should be constructively helpful abroad as well, without creating international complications or becoming self-defeating by the operation of economic and political forces.

VI. CONCLUDING CONSIDERATIONS

Before bringing our analysis to a close, we must mention briefly two other aspects of the appraisal of the debenture plan, its relation to surplus control and to so-called price stabilization.

The Plan as Surplus Control

The debenture plan has been urged as a measure of surplus control. Mr. L. J. Taber, Master of the National Grange, said recently before the Senate Committee:[1]

> It will help eliminate the surplus.
>
> . . . .
>
> . . . . The reason that I am emphasizing the export debenture is that we believe it is so certain to work, that its simplicity, its dependability make it the step to enable the farm board to deal with the surplus problem.

As a surplus control measure it is clearly of limited scope. It is intended to apply only to farm products of which the surplus is of the exportable variety. It would have no bearing on price-depressing "economic surpluses" which are not readily susceptible of relief by exportation, as in the cases of hay, potatoes, perishable fruits and vegetables, and many others. These crops would continue to demand surplus control, and it seems not unreasonable to suppose that methods that would serve this purpose could be adapted to those products that we export in substantial amounts.

In a special sense only is it a surplus control plan. It is designed to prevent exportable surpluses, as they exist at a given time, from exerting their usual influence upon domestic prices. This influence would persist, but it would operate under conditions causing a substantial differential to arise between domestic and export prices, in favor of domestic prices. The action might better be designated as surplus - consequence - influencing, rather than surplus-controlling. Much the same could be said of the equalization fee plan, although this called for more centralized handling of the surplus.

In a larger sense, however, the debenture plan is definitely not a surplus control measure. It calls for no measures to deal directly with an existing surplus. It would apply alike in years when exportable sur-

[1] *Hearings*, April 3, 1929, pp. 514–15.

pluses were large and when they were small, when they did not lead to price depression as in years when they did. It would operate in the direction of increasing exportable surpluses of the commodities to which it was applied, such as wheat and cotton, thus tending to enlarge the surplus problem rather than alleviating or curing it. Consequently, it would intensify rather than lessen the need for measures to restrain the tendency to such overproduction as leads to unremunerative prices. Moreover, so far as the agricultural surpluses constitute a world problem, the plan would merely relieve our producers of some of the consequences of general overproduction, initially, but intensify the world problem, both immediately and through subsequent expansion of our production and exports, even if our policy were not imitated abroad.

If we really seek surplus control, we should adopt measures calculated to restrain the emergence of such surpluses as tend to bring prices down to levels unremunerative to producers, and operative procedures designed to dispose of these "economic surpluses" in such ways as could be generally adopted with success, in various products at home and among the agricultural nations. The debenture plan does not represent a measure of this type. Though its adoption would not render impossible other measures of this character, it would render their task more difficult rather than easier.

Relation to Price Stabilization

The instability of farm prices, within a year and from year to year, is one of the evils which certain measures of farm relief are designed to alleviate if not to cure. The debenture plan is not designed to contribute to this end, but it is not generally realized that in practice it could be expected to accentuate the evil.

Upon the reasoning most commonly employed, the debenture system would not affect the instability of prices; it would merely elevate prices; differentials between domestic and export prices would be attained and maintained, but intraseasonal and interseasonal variations in prices would be unaffected. If the system were applied to a large group of commodities, which was neither expanded nor contracted; if rates were held constant; if it failed to stimulate production—this reasoning would probably apply, and the system would neither increase nor decrease the instability of prices, after it had been fully put in force.

In fact, however, these conditions would not obtain. Even the ardent supporters of the plan realize that it contains possibilities of stimulating production, and they have, as we have seen, accepted one or another scheme of flexible rates as a means of restraint upon this tendency. Even the earlier bills contained provisions for expansion of the list of debenturable products, and for changes in rates by administrative action, while the latest bill vests still greater responsibilities in the directing agency.

It is quite clear that the initial effect of putting a commodity on the debenturable list, or of increasing a debenture rate, would introduce a special element of instability in prices, affecting not merely the commodity itself but others that were more or less closely related to it. The same would be true, in a different direction, of reductions in rates or removal of a commodity from the list. One can conceive of the adjustment of rates as being applied with the purpose of minimizing price variations from year to year. But no one has proposed that this be done, and it would almost certainly run counter to the real objective of the plan, price elevation. Moreover, the possibility of changes in the list or in rates would introduce a special element making for price instability.

It is no defense of the plan to argue that the same point can be made against changes in tariff duties. Admittedly this is one of the inescapable evils connected with tariff alterations. But the application of the debenture plan to commodities of which we produce huge surpluses, on an annual basis, might easily be more far-reaching in this respect, because of the relatively large volume of stocks held and the more widespread operation of dealings in futures. One of the points in favor of the debenture plan, in the view of many, is that it would not interfere with business, with established trade processes and practices. In large measure this might be true if the system were a settled one, but it would be far from true if the system were subject to repeated alteration by Congress and its administrative agencies. The disturbance to business frequently associated with tariff revision might well be exceeded by the disturbance caused to the business interests directly concerned in such frequent alterations of the debenture system as are in contemplation.

Furthermore, the provision for adjustments of debenture rates according to schedules of output would operate, if the schedule were so constructed as to be effective in checking a stimulus to production, in a manner conducive to price instability. Suppose a bumper crop harvested as the result of good yields on a large acreage. A substantial reduction in the debenture rate would be made at the very time when the surplus was largest, the world price presumably lowest, and the farmers presumably most in need of protection against price decline. If the schedule were allowed to operate, against the protests from farmers that in their direst need their protection was reduced, the price would fall farther than if the system had not been applied. Perhaps in the very next year production might fall so that the normal debenture rate would apply. Then there would be an added factor making for price advances.

We do not overlook the fact that other measures might be attempted, with no opposition from devotees of the debenture plan, to moderate fluctuations in prices. It is not inconceivable that by such measures the instability in prices might be lessened even if the debenture system were in effect. But we cannot escape the inference that the debenture plan per se would heighten, not lessen, the variations in prices, and that it would intensify the large difficulties that any stabilization program must needs encounter.

It is conceivable that a restricted form of the debenture plan might possibly be found helpful in limiting extreme depressions of prices, and thus of some utility in lessening price variations. Here the analogy of the British corn bounties is most directly in point. It will be recalled that these were payable only when prices of the grains in question fell below stated levels. Suppose for example, that a schedule were drawn up in accordance with which export debentures at the rate of 20 cents a bushel were issuable if Chicago futures prices, reflecting Liverpool prices, fell for a week below $1.05 a bushel, at 15 cents if they ranged between $1.05 and $1.10, at 10 cents if they ranged between $1.10 and $1.15, and at 5 cents if they ranged from $1.15 to $1.20; but that no debentures would be issuable when the Chicago future ranged above $1.20. If such a scheme were found practicable, it might yield support to the market when prices fell below certain levels, and tend in the direction of restricting price variations. Whether it would be superior or inferior to alternative means for accomplishing the same result, under machinery about to be set up, cannot be forecast. But it would be a very different scheme from the proposed debenture plan, and would be far less likely to provoke retaliation abroad.

Conclusions

In summarizing the results of our analysis of the export debenture plan, with special reference to wheat, we would repeat that it represents an attempt to predict the unpredictable; but so, of course, does the reasoning of proponents of the plan. Even a retrospective examination of the workings of the system would encounter insuperable difficulties in disentangling, from the facts as they appeared, the effects properly to be ascribed to the debenture policy. We have tried to take into account all the theory, reasoning, and evidence brought forward on behalf of the plan, and a good deal more equally worthy of attention, as regards its probable operation. We have sought to interpret the whole with fairness and insight. We have not been content to point out possibilities, for good or ill, but have endeavored to weigh the probabilities without bias.

The true value of the plan must be judged not by its theoretical justice or appropriateness, but by its practical virtues—gross and net. The investigation leads us to the conclusion that these virtues have been gravely, however unintentionally, misrepresented. In our considered judgment, the plan would fail in practice to yield the promised advantages. No one can foretell how well or how badly it would work, but it seems to us safe to say that at best it could not be expected to yield more than a portion, and possibly only a small fraction, of the benefits that are claimed for it, and this at the cost of numerous complications.

At the outset, the scheme would raise farm prices of wheat, but not by the full extent of the debenture rate. Even if there were no expansion of output and no foreign retaliation, the extent of price increase properly attributable to the operation of the plan would vary with different wheats, in different regions, and from year to year. There are strong reasons for rejecting, even as respects the first year or two, the view that farm prices would be promptly, uniformly, and generally raised by the amount of the debenture rate. The price benefits actually realized by farmers would probably be much less, and would be very unequally distributed, geographically and locally. Some who are most in need of relief might gain least.

The tendency of continued operation would be to stimulate production and export, particularly of those wheats which otherwise tend to be on an export basis because least in demand here. There is ample scope for response to such stimulus, if the plan were applied generally, and even more if it were limited to wheat, or to wheat and a few products that did not compete for the same land. The result of our increased exports would be to depress world wheat prices below what they would otherwise have been. In our view, it is likely that this process would go so far, within three or four years, as largely to wipe out the initial price advantage to farmers. These results would not be equally distributed: some farmers would continue net gainers; others would probably be net losers; but the aggregate net gain would probably be slight.

If the plan were simply continued, these results would lead to readjustments in acreage, both here and abroad. A new equilibrium would then be reached in which, perhaps in the second half of a decade, our wheat growers would reap a somewhat larger net gain than in the intermediate stage, though considerably less than at the outset. If foreign acreage were highly price-responsive, less readjustment would be required here and the eventual net gain to American wheat growers would be larger than we are disposed to expect; but we question whether such readjustments, in the countries most significant in determining world prices, would be of sufficient magnitude to alter our conclusions substantially.

Efforts to increase the gains by raising debenture rates might succeed, in a measure, but the repetition of the process would tend shortly to nullify these gains, at least in considerable part. The plan would not be self-eliminating, but self-perpetuating, unless radical schedules of reduction in rates with expansion of production were put in force. Such an operation, with price declines accentuated thereby, would doubtless check expansion and probably cause contraction from the expanded level, but only at a cost of material readjustment and by eliminating most or all of the advantages claimed for the debenture policy. The abandonment of the system, if brought about by rising costs to the Treasury and disappointment with its contribution to farm prosperity, would entail greater pains of readjustment in agriculture and greater disturbance to business interests concerned.

So far as foreign experience is really pertinent, it seems to us to confirm such an analysis, rather than to support the theory of advocates of the plan. The experience of Germany and other nations with import certificates, a device similar to the proposed export debentures, is not truly applicable because that system has been and is applied under radically different conditions and with quite different objectives. England's experience with grain export bounties was had under quite dissimilar conditions and is obscured in the mists of history; but so far as we can discern from the literature, it yields nothing materially inconsistent with our view of the working of the proposed debenture plan. The more recent experience with sugar bounties in continental Europe tends to bear out our reasoning more emphatically, and particularly reveals the possibility of international complications and grave disturbances to industry and trade without offsetting benefits to agriculture.

The possibilities of retaliatory action by foreign governments are large, and our own law and practice would require such resistance on the part of the United States to foreign measures of the type of the debenture plan. While we should not expect these possibilities to be realized at all completely, we see good reason to expect sufficient resistance and retaliation to cause substantial diminution in the anticipated benefits to American farmers, appreciable alteration in the course of trade, and significant international complications.

In the light of this analysis we feel it unnecessary to consider at length all of the arguments that have been brought forward for and against the plan. But it is perhaps worth while to touch very briefly upon a few. Though we regard the prejudice against subsidies as generally wholesome, and recognize that there are points of similarity between the debenture plan and a subsidy, we do not consider serious, or notably well founded, the argument that the scheme should be rejected because it would subsidize agriculture. The term is not appropriate, and various other proposals are open to very much the same objection. The necessity for raising additional public revenues to replace the customs receipts absorbed by the plan is not a material objection under present conditions, provided the plan would really work as its advocates expect; but it would become serious if the plan proved to cost the Treasury heavily without genuine benefit to agriculture.

In the light of our own analysis, we believe that costs to consumers (as well as benefits to farmers) would be much less than those that have been calculated, on any given scale of debenture rates; and we agree that moderate increases in the prices of several agricultural products could be easily tolerated. We frankly regard all the calculations of burden to the Treasury, cost to the public, and financial benefits to the farmer as thoroughly unreliable if treated as forecasts; for neither the list of debenturable products, nor the exports of these, nor the debenture rates, nor the reflex effect upon farmer prices or consumer prices, can be predicted. We should expect, if the plan were applied rather comprehensively, that the cost to the Treasury would be greater, while costs to consumers and benefits to farmers would be less, than has usually been calculated; and that with continued operation of the plan these differences would be accentuated. We believe the plan would not present administrative problems and difficulties nearly as large and numerous as would several alternative plans, but in the light of our analysis we feel certain that experience would show that its advocates have greatly overestimated its simplicity.

We believe the adoption of the plan would be, in effect, a radical innovation in our national policy, in spite of a large measure of truth in analogies to the protective tariff. Yet we would not condemn it on this score. Our Federal Reserve Act, the national prohibition amendment, the Agricultural Marketing Act, and many other acts have represented radical innovations. Some have worked well. On the other hand, we consider that it is improper and unsafe to regard it as a simple experiment, deserving a trial merely because it has been widely urged, with a view to dropping it if it does not yield desired results. It is too important a proposal, with too far-reaching possibilities of cost and disadvantage, to be light-heartedly adopted. Even if initially experimented with on a limited scale, the difficulty of disentangling the results of the trial, and the possibilities of fastening upon the country a far more extensive and prolonged experiment, would be serious.

The argument that it would necessitate revision of import tariffs is doubtless sound so far as it goes, but of no great moment except as increasing the number of complications, and of no great importance as regards wheat and flour. We do not regard it as a sound argument for the plan that it would strengthen the position of the whole protective tariff. If it did this it would, in our judgment, be to the detriment of the farming class, who probably suffer some net injury from our tariff system as it has been and as it is likely to be under practical modification in the direction of higher duties. Nor do we share the cynical view that it might be well to try out the debenture plan in the hope of bringing the tariff into disrepute, or of forcing tariff readjustments in favor of the farmer. Logical as the argument appears that it is a natural complement of the protective tariff, we believe that the plan would not prove to be such in fact.

We cannot go so far as to assert, with President Hoover, that the plan "contains elements which would bring American agriculture to disaster." On the other hand, and in part for the same reasons that lead us to a more moderate view of its dangers, we see no possibility that it would yield "equality for agriculture." Perhaps its largest fruit would be bitter disappointment. The direct and indirect costs of the plan itself, particularly in view of the difficulty of retracing the step, would not be unimportant; but the delay caused by moving along the wrong road would be more serious in reality. We believe the plan is not truly harmonious with the new measure of farm relief, or with the types of remedial and constructive policy that the federal farm board will do well to adopt to supplement the marketing reorganization that now appears to be its major task. If one could assume that the board could freely exercise its discretion as to using or ignoring a power that might be given it to apply the debenture plan, one might not object so much to such a grant of power; but this assumption is hardly tenable. There is a real danger that if enacted even in an optional form, it might, as President Hoover thought inevitable, "confuse and minimize the much more far-reaching plan for farm relief. . . . ."

Finally, we hold that, now that the federal farm board has been established, it should lie within the scope of the board's functions to consider fairly, with the aid of a competent research staff, all plausible suggestions for developments in our agricultural policy. The debenture plan, or some variant or modification of it, may have more genuine merit than our analysis has disclosed. There may possibly be devised some method of experimentation with it that would yield fruitful net results. If, after due investigation, the board should propose such an addition to its powers and duties, its recommendation would deserve great weight; or if Congress should, on its own initiative, adopt the debenture plan in some form bearing the endorsement of the board after such study, the situation would be altered. But we are convinced that, with all deference to the intelligence and sincerity of proponents of the plan, the reasoning behind it is not only inadequate but leads to erroneous conclusions. For Congress to put the debenture plan into law, at the present juncture, would be a mistake. We venture to believe that many of those, in Congress and outside, who have been disposed to support the plan will modify their views with fuller knowledge and upon maturer consideration.

This study is the work of Joseph S. Davis, with the aid of criticisms and suggestions from Alonzo E. Taylor, Holbrook Working, L. B. Zapoleon, and M. K. Bennett. Generous and friendly comments on an earlier manuscript on the debenture plan, received from its chief proponent, Charles L. Stewart, were helpful also in this one.

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