

A Price-Support Program for Farm Commodities

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Our understanding was that the purpose of this session was to stimulate the thinking of those attending the conference, the specific objective being to learn more about the subject of price supports. To accomplish this objective we have decided to present, as a basis for discussion, a price-support program for the United States. We realize, of course, that the program has many weaknesses, but we believe that a critical appraisal of our proposal will do more to stimulate thinking and facilitate learning than anything we could have prepared for this session.

The paper, in its present form, is not suitable for use in educational work on public policy with farm people; however, it should provide useful material for those who are responsible for developing public policy material to be used with farm people.

This program is not suggested with the idea that any part of it would ever be incorporated into actual price-support laws. We do think, however, that the program points out many of the problems with which a price support program must deal. The problems are brought into sharp, clear focus when efforts are made to design a program which satisfactorily resolves these problems. For this reason a program is presented rather than a discussion of generalities and principles.

This paper is divided into three main sections: (1) the functions of price supports, (2) a suggested program, and (3) an appraisal of the program.

Many significant details of the suggested program are omitted partially because of time and space limitations, and also because they would tend to obscure the major elements of the program.

FUNCTIONS OF PRICE SUPPORTS

The functions of prices in an economy are: (1) to allocate resources among the many alternative sources of employment and (2) to distribute the total income to owners of the resources. In a dynamic economy the supply of and demand for the many factors and products are constantly changing. Prices must change

if resources are to be allocated as the market dictates. Prices do not perform the two functions in a manner that is satisfactory to all individuals and groups. Farmers have been particularly dissatisfied with the result of free prices and have requested price supports.

Several peculiar characteristics of farm production and marketing which can be identified are responsible for free prices not being satisfactory to many farmers. We will also argue that these same characteristics cause free prices to act in a manner that is not always in the public interest. What are these characteristics?

CHARACTERISTICS OF DEMAND. The demand for most farm products is extremely inelastic. Most studies indicate that the price elasticity of many important farm products is about -0.2 . The elasticity for beef, which has the highest elasticity of the major farm products, is only about -0.7 . The inelastic demand means that a small change in supply, assuming the demand schedule does not shift, causes a sharp change in price. For a commodity with a price elasticity of -0.2 , a 10 percent increase in quantity results in a 50 percent decrease in prices. Also when demand is inelastic, the gross income declines as volume increases. Production costs, particularly the harvesting and marketing costs, increase as the size of the crop increases. Hence, net income is usually reduced sharply as the size of the crop increases. Low net incomes in years of abundant production are one reason farmers are dissatisfied with free market prices. (There is apparently a high correlation between the elasticity of demand of a commodity and the demand on the part of producers of the commodity for price supports.)

Exports deserve special mention since they represent a segment of demand which is subject, to a large extent, to the dictates of our own government and of foreign governments. In no sense can world trade be called free any more. If the export of farm commodities is in the interest of this country, then the country as a whole, not just farmers, should assume the risk of producing for the export market.

CHARACTERISTICS OF SUPPLY. Farmers do not have complete control over supply. Weather, which is beyond the farmer's control, can cause wide variations in supply. Producers often make errors in their estimate of the demand schedule, and demand can

change very rapidly, particularly the export segment. Farmers are practically powerless to adjust production to the changed demand once a production cycle is underway. Farmers have watched industry adjust production quickly when it has made an error in its estimates and prices threaten to fall or when demand changes. Since a high proportion of industrial costs are variable, industry often finds it more profitable to close down or curtail production than to accept a low price for its product. The nature of agricultural production and the fact that a small share of total costs are variable dictate that the individual farmer continue to produce even at very low prices. Hence, farmers are seeking protection from the price drops associated with errors in predicting demand, a changed demand, or changes in supply which are beyond their control.

CHARACTERISTICS OF AGRICULTURAL PRICES. The characteristics of supply and demand for agricultural commodities are such that farm prices can and do fluctuate widely when their free play is uninterrupted. In addition, changes in the level of economic activity in the nation may cause violent changes in farm prices. Historically, farm prices have behaved much more erratically than have other prices during rapid swings in the business cycle.

If the price mechanism is to be used to allocate resources and distribute income, conditions must be such, and prices must behave in such a way that this objective is accomplished. To be sure, free prices can allocate resources and distribute income, but not in a manner satisfactory to American farmers. The destruction of capital, soil erosion, and bankruptcy as a result of free, erratic, and low farm prices may be one way to reallocate farm resources, but this process is not the only way to reallocate farm resources. Nor can one even agree that it is a satisfactory way. Less destructive, less painful, and less expensive ways of reallocating farm resources can be found.

THE PROGRAM

The authors kept several ideas in mind as they developed the program.

First, we conceived of a price-support program as a device built into the free market price system in such a way that the program would not deprive prices of their primary function of

acting as guideposts to production. All we claim for our program is that it would smooth out erratic price fluctuations, and in this way make prices serve their allocative and distributive functions, even better than if there were no price supports, by reducing price and income uncertainties.

Second, it was recognized, however, that at some danger point in the supply and demand situation for either particular commodities, or the agricultural economy as a whole, production controls must be resorted to. Such controls do introduce some element of monopoly, and in view of our value judgments may rightly be deemed undesirable. We feel, however, that the value judgments of farmers and the enlightened public are such that they will not tolerate distressed conditions without doing something about them. Farmers are likely to act in self-defense and try to prevent extreme price fluctuations through some form of "private" control, which may become a fixed monopoly part of the picture even under "normal" conditions. Under such circumstances government controls may seem preferable to private action though the danger of political pressure to perpetuate these controls in favor of special farmer groups must be recognized.

Third, the program was kept as simple as possible. It is recognized, however, that all phases of the program are not simple. Indeed, a really simple program probably will not work.

Fourth, it was accepted that any program which really supports prices will cost money and will have to be financed out of either tax money, or consumer expenditures, or both. There is no such thing as a "self-financing" price-support program. The real question is whether a particular program will cost more, or less, than alternative programs.

Scope and Principles of the Proposed Program

The purpose of this section is to present a brief outline of the program before we move into the details.

Our proposal deals with price supports for perishable farm commodities, but it applies as well to the so-called "basic" or "storable" farm commodities. In fact, we believe that the distinction between "basics" and "nonbasics," as well as that between "storables" and "nonstorables" makes little economic sense. Some nonbasic commodities are fully as storable as the

six basic commodities; others can surely be stored in processed form, even though it is true that they would not for long remain useful for human consumption in their original form.

The suggested program provides price supports for all farm products. Questions will undoubtedly be raised as to the advisability of supporting all farm products. The authors could not find a logical place to stop, however. A line could logically be drawn on either elasticity of demand or importance of a commodity to the national interest. If a commodity has an elasticity of unity or greater, there is no need for price supports. We do not know of any agricultural commodity, however, with an elasticity of unity or greater. A review of price-support experience for the last twenty years reveals that under a program where all commodities are not automatically covered, many commodities which are of little importance to either the bulk of the farmers or to society receive price-support benefits while many important commodities do not receive supports.

Flexible price supports are suggested. An effort was made to make the price supports flexible enough so that over a period of time and when full employment prevails the free forces of supply and demand will be able to clear the market. In some years, however, the support prices will likely not clear the market. When they do clear the market, a program would not be needed or would be ineffective.

Different methods and approaches are necessary depending on special supply and demand conditions prevailing during particular periods. We distinguish two such conditions and periods—full employment and depression.

(1) Under conditions of full employment, we expect the market forces to take care of most of the price fluctuations without undue stress on the farm sector. Consequently, we propose a wide range of support levels, say, between 60 and 90 percent of parity, as defined by the Agricultural Acts of 1948 and 1949.¹

¹Parity is computed under these Acts as follows:

(a) Divide the average price received by farmers for each commodity for the last ten years by the average of the index numbers of all prices received by farmers (base 1910-14). This gives the so-called "adjusted" base price for each commodity, and is a fictitious price which was not paid to farmers in the base period, or at any time.

(b) Multiply the "adjusted" base price with the index number of all prices paid by farmers, including interest, taxes, and wages paid to hired labor, as of the month

The actual support price for a commodity, whether crop or livestock, will be determined by the anticipated sales volume of the year during which that support price is in effect. This anticipated sales volume will be translated into a "national acreage" or "number" figure by using the average yield of the five preceding years for conversion. The national figures will not be broken down into state, county, and individual farm allotments; they are somewhat in the nature of the over-all "goals" which the USDA has published annually.

Support levels would change from one year to the next inversely, and roughly proportionately, to the amount of underplanting or overplanting of crops, underbreeding or overbreeding of livestock, and to prospective changes in demand. Farmers would be expected, then, as a group, to adjust their production bases in response to the changes in the support price level. Under conditions of full employment, we do not expect the changes in the support price level due to demand changes to be of a disturbing nature.

When the price for a particular commodity falls below the 75 percent parity level, production controls would seem to be in order, if producers want them. These would take the form of individual farm marketing quotas (instead of acreage or number allotments) established under referendum provisions as we have them now. Support prices could then be adjusted upward if farmers agreed to reduce production accordingly. Individual marketing quotas would be made transferable.

(2) When a depression hits the country, support prices would be frozen for the duration of the depression at the percentages of the parity price level that prevailed before the depression. This means that support prices would retain their relationships to each other, even though actual support prices could change as parity changes.

Under both of the conditions and periods, price supports would operate through the market and the market price. That

for which parity is computed. This gives the parity price of 100 percent, from which the support levels are computed.

It is recognized that the parity formula has many defects, the main one being that it very imperfectly reflects current demand and production conditions. We feel that permitting prices to flex over a wide range overcomes many of the objections to the parity formula. We would have no objections to a new parity formula, and a new parity formula would not likely change the major provisions of the suggested program.

is, the government would purchase, store up, and dispose of that part of the output which would not be taken by the market at the support price.

The salient features of this proposal will stand out more clearly when we embark on a discussion of its most important points. For this purpose we shall again adhere to our distinction between periods of full employment and those of distress conditions.

Price Supports Under Full Employment Conditions

THE RANGE OF SUPPORT PRICES. We propose that price supports shall vary between 60 and 90 percent of parity, for all farm commodities with the exception of citrus fruit, to which a range of between 27 and 40 percent of parity would apply.

Sixty percent was set as a minimum for the following reasons: (1) It is low enough during periods of full employment to allow the market to clear except when yield is abnormally high. On the other hand, it is low enough not to interfere with the differential that the market establishes for the various commodities. Over the last six years prices of major commodities, except citrus fruit, have seldom gone below 60 percent of parity (Table 1). (2) Prices of 60 percent of parity will enable farmers with average efficiency to realize out-of-pocket costs. On the other hand, 60 percent is low enough to encourage a decrease in production for at least some farmers, i.e., marginal producers. (3) Even if 60 percent is not low enough to effect the correct allocation of resources, farmers will not likely accept a lower level.

It is more difficult to justify 90 percent as a maximum. The maximum was set at this level, however, as we are concerned with minimum prices and not with maximum prices. If price ceilings were also involved, more attention would need to be given to the top level.

The lower levels of supports for citrus fruit is based on the fact that the citrus fruit industry experienced a decided change in production and processing methods, which resulted in continuously lower price levels after World War II. This structural change would require that a different base period than that of 1910-14 should be established; we did not do so, but simply adjusted the level of the support range downward, which has about the same effect as computing a new base period for citrus fruit.

THE DETERMINATION OF SUPPORT PRICES. For the first year the exact level of the annual support price will depend on the supply and demand situation indicated for that year. Theoretically, the support price should be set at a level which permits the supply to move freely into and out of the market if and when production rates (yields) are normal. However, we can hardly start from such an equilibrium price because present demand and supply conditions may reflect existing support programs and their effects. The only practical assumption is that the year preceding the first announcement of support levels did supply the market with what the market wanted; to assume otherwise would make the transition from the present setup to the new one extremely difficult.

For the first year, then, in which the program is in effect, support prices for commodities presently supported will be kept at the same level. For all commodities which were not supported in the preceding year, the support price will be at the level which actually prevailed during the preceding year, provided they fall within the 60 to 90 percent range. If actual prices were above 90 percent of parity, the support will be set at 90 percent; and if actual prices were below 60 percent, support prices will be set at 60 percent of parity. This assumes that the same quantity will move at the same price during the first year of the program as moved during the year before the program started. (We recognize that there is an error in this statement. For most commodities demand is increasing, particularly due to population growth. On the other hand, yields are tending to increase. An underestimation of the quantity demanded will likely be automatically offset by an increase in yields.)

The quantities assumed to move during the year will be converted to national acreage goals in the case of crops and to national number goals in the case of livestock. In converting to acreage, the average yield for the preceding five years will be used. This sets the stage for the future operation of the program. It is necessary to have acreage or number goals computed from a five-year moving average to get away from abnormal yields, which are to a large extent beyond the farmer's control.

In the second and succeeding years, support prices and acreage or number goals will be raised or lowered depending on a

combination of three factors. The first one is the compliance of farmers, as a group, with the announced goals. The second one stems from changes in the five-year yield average. The third one originates from changes in the demand. It is evident that the possible number of cases reflecting changes in each of the three "variable" factors is rather large—27. For a quick appraisal of how the program actually works, we shall have to apply the usual procedure of holding first one factor constant and then the other, etc.

Let us first assume, then, that demand will not change, while farmers and production behave in one of the following ways:

(1) Farmers stayed within the specified goals, but yield is above normal for certain crops or livestock. Support prices for the next year will not be changed, even though the government has to buy part of the output. However, the new acreage or number goals may be lowered since the new five-year yield average now includes last year's high yield.

(2) Farmers overplanted or overbred the goal, while yields stayed normal or were above normal. The support price for the second year will be lowered by the same number of percentage points that farmers overstepped percentage-wise the acreage or number goals. For example, if the acreage exceeded the goal by 10 percent, the support price would be dropped 10 points, i.e., from 90 to 80 percent of parity and not by 10 percent of 90, which would give an 81 percent support.

(3) Farmers underproduced the acreage or number goal, and yield was normal or less. The support price for the second year will be raised by the same number of points as the percentage underplanting of the goal. However, the support price would not be raised above the 90 percent level.

(4) Farmers produced the specified acreage or number in the first year, but yield was abnormally low. The support price in the second year would remain at the same level as during the first. The acreage goal would be adjusted upward, however, due to a lower five-year moving average yield.

Let us now drop the assumption of constant demand, and assume that demand will increase during the second and succeeding years. Under this assumption of increased demand, when

combined with the various cases of farmer and production behavior, the program shapes up in the following alternate ways:

(1) Farmers exceeded acreage or number goals in the first year, obtained normal yields, but the increased output was taken by the market at support prices because of the increase in demand. In that case, the acreage or number goals for the second year will be computed from the quantity taken (or produced), and the support price will remain the same.

(2) Farmers exceeded the acreage goal in the first year by more than demand increased. In this case the support price will be lowered the same number of points as the percent production exceeds the amount taken by consumers.

(3) Producers stayed within the goals, obtained normal yields, but demand pushed the actual price above the support price. The acreage goal in the second year will be computed from total production, and the support price will remain unchanged.

(4) Producers planted less than the goal and, hence, actual price was above the support price. In the second year, the acreage goal will be computed from production in the first year, and the support price will be raised by the same number of points that the goal is percentage-wise underplanted, provided the support price is not already at 90 percent.

Now let us assume that demand decreases. The decreasing demand is taken into account in the second and succeeding years by once again basing the goal on quantity actually taken in the first year. The following conditions are visualized:

(1) Farmers produced the requested acreage or number, and yields were normal. In the second year the acreage goal would be computed from the quantity actually taken by consumers, but the support price would not be changed. Of course, it is likely that if the goal were continuously reduced, farmers would overplant. Then, they would be penalized price-wise.

(2) Farmers overplanted the goal. In this case, the goal for the second year is computed from the quantity consumers bought, and the support price is lowered the same number of points as farmers percentage-wise overplanted the goal.

(3) Farmers underplanted the goal to the extent that actual production equaled the amount demanded at the price support prevailing in the first year. In the second year, the acreage goal will be computed from the quantity actually produced in the first year, and the support price will now be lowered.

(4) Farmers underproduced the goal in the first year to the extent that prices rose above the support level. In the second year the acreage goal will be computed from actual production, and the support price will be raised, if it is below 90 percent, the same number of points as the farmers percentage-wise underplanted.

GENERAL COMMENTS. From our sketch of the various ways in which the proposed program tries to adjust production to demand, the following features and issues may be emphasized:

(1) How is the transition made from the present support system to the one proposed? For prices which were supported in the year preceding the year in which this program is started, prices will be supported for the first year at the prices actually prevailing during the preceding year, not to exceed 90 percent of parity. Acreage or number goals will be computed, based not on total production as was done in the case of crops not receiving supports, but on production actually consumed at the old support price, i.e., total production minus government purchases. In the succeeding years, support prices will fluctuate depending on farmers' actions and demand as for commodities not being supported when the program starts.

(2) Why will support prices be raised or lowered by the same number of parity points as farmers percentage-wise deviate from the goals? Decreasing the support by one full percent of parity for each one percent overproduction should reduce gross income slightly and have a greater effect on net income. The penalty should be sufficient to cause farmers as a whole to reduce planned production if there are alternative production opportunities. On the other hand, changes of the magnitude indicated should not completely unstabilize prices or production.

(3) How is the bothersome question of abnormally high or abnormally low yields taken care of in the proposal? Abnormally high yields are considered only insofar as they enter into the computations of the five-year moving average. For example, let

us assume as we did above, that demand increased and that yields were substantially above normal. In computing the acreage goal for the following year, that part of the overproduction due to the abnormally high yield will not be considered. On the other hand, low yields come into the picture in two ways. Of course, they enter into the five-year average yield and, hence, tend to increase the goal. The goal for the next year is based on consumption at the support price or production (and consumption), whichever is smaller. When low yields result in a production below the quantity demanded at the support price, actual production (which was also consumption) becomes the goal for the coming year. Also in such a case farmers will not be penalized price-wise even though they had overplanted the goal in the year in question. On the other hand, support prices will not be raised when production is below the quantity demanded because yields are abnormally low.

(4) Why are goals not increased in cases where demand outstrips production, and prices rise above the support levels? In order to raise the goals with any degree of precision, we would need to estimate fairly closely elasticities and schedules of demand. We do not have this information. That leaves the alternative of not announcing any goal and leaving the support price where it was or raising the goal. It does not seem desirable, however, to omit goals completely. This leaves the alternative of adhering to the consumption of the preceding year as the goal for the next year, and this is the one we chose. Of course, we anticipate that the above-support prices actually received will stimulate production. But we do not translate this anticipation into goals for fear that farmers would find these goals unrealistic and that they would be conducive to overproduction.

SEASONAL AND REGIONAL ADJUSTMENTS OF PRICE SUPPORTS. The support prices will be adjusted seasonally. They will be adjusted to the same pattern that has prevailed over the five preceding years. The support price will be adjusted up and down the same percent as monthly prices vary from the yearly average price. In Table 2, the five-year average price by months, percent variation from the yearly average, and monthly support prices are indicated for eggs and potatoes.

Adjusting support prices seasonally has several advantages. In the first place, it is believed that the quantity of the product

that the government purchases will be smaller: Purchases during normal peak production seasons would be smaller. Purchases during slack production seasons should be slight. Higher support prices in months of slack production should encourage farmers to "even out" production of items such as eggs and milk, and this should be in the interest of the consumer, and to the extent that consumption is encouraged, should result in better marketing and less government purchases. Finally, when there is an overproduction, government purchases should be distributed throughout the year, reducing the need for storage facilities and making disposition easier.

Support prices will not be adjusted by regions. To some extent the seasonal adjustment will result in different support prices for different regions. This is particularly true of commodities such as fresh vegetables and fruit. A nation-wide support price should encourage shifts in production to those regions which can produce the commodity most efficiently.

WHEN THE SUPPORT YEAR BEGINS. A given support price will be in effect for a year. The support year will correspond to the production marketing year for each crop. For example, the support price for the 1953 corn crop would become effective on September 1, 1953, and continue in effect through August 1954. In the case of potatoes, the support year would begin just prior to the marketing season for late potatoes, which comprise about three-fourths of the crop. In the case of items produced throughout the year, the support year should begin just prior to the month in which the seasonal low usually prevails. There is a real problem in the case of hogs and cattle, which while produced throughout the year from a national point of view, are sold only at specified times by individual farmers. It is suggested, without much logical basis, that the support year for hogs and cattle begin September 1.

TWO EXAMPLES FOR THE ACTUAL OPERATION OF THE PROGRAM. Potatoes and milk are used as examples to show how the program will work. In both problems it is assumed that 1953 is the first year of the support program and that 1954 is the second year. Potato prices were not supported in 1952 while milk prices were.

(1) *Potatoes.* In this example it is assumed that the support year starts on January 1 so that published statistics can be used.

Statistics are available to start the year on any given month.

The following information is needed to determine the support price for 1953:

- Price as percent of parity for 1952, which is 132.
- Production in 1952, which is 374,504,000 bushels.
- Average yield per acre 1948-52, which is 239 bushels.

As price in 1952 was above 90 percent of parity, prices will be supported at 90 percent of parity in 1953. (See Table 2 for monthly support prices.) The acreage goal will be 1,567,000 acres, which is determined by dividing the five-year yield into 1952 production.

The manner in which the program will work in 1954 under a majority of the supply and demand situations that could exist is shown in Table 3.

(2) *Milk*. In this example, it is assumed that the base year includes April 1952 through March 1953. (Milk prices were supported in 1952-53.) The following information is needed to determine the support price for the year ending March 1954.

Price as percent of parity during base year	over 90 percent
Production during base year	117.5 billion pounds
Government purchases during base year	7.4 billion pounds
Consumption at or above support price	110.1 billion pounds
Average production per cow last five years	5,326 pounds
Number of cows milked during year	21,553,000

In the year beginning April 1953 and ending March 1954, prices will be supported at 90 percent of parity. The goal will be 20,672,00 milk cows, which is determined by dividing the average five-year production into 110.1 billion pounds, the amount taken at the support price in 1952.

The manner in which the program will work in the year ending March 1955 under some of the supply and demand situations which could exist is shown in Table 4. Many of the possible combinations arising from production above and below normal that were included in the potato example are excluded because exactly the same principles apply.

Market Supports Under Depression Conditions

When a depression hits, all price supports will be frozen at the levels, as expressed in terms of the parity price, which prevailed before the depression. For the purpose of determining exactly when depression conditions exist, some economic indicator must be selected. We chose the level of employment for the purpose of this paper. A depression exists when the level of employment falls off by 10 percent from the average of the past five years. Other indicators, or a combination of indicators, may be used, of course.

The freezing of price-support levels at the predepression parity scale assumes that the depression will last only a few years and that the pattern of consumer demand will re-establish itself in the old way once the depression is over. In other words, it is assumed that a depression is really abnormal, and that it is desirable to maintain the predepression composition of the total agricultural output as well as the established pattern of price differentials between agricultural products. If these assumptions, or objectives, are not acceptable, some change in the proposal seems warranted.

The freezing of price-support levels does not mean that the same absolute support prices will prevail throughout the depression. Since support prices are expressed in terms of the parity prices, they must change as the index of prices paid by farmers changes. Our experiences show that the index of prices paid by farmers moves down much more slowly than the index of prices received.

Method of Attaining Support Prices

(1) Regardless of whether full employment or depression conditions prevail, prices will be supported by the government by purchases in the market place.

Government purchases are used to support prices for several reasons. First, with an inelastic demand the cost to the government will be lower than under any alternative method. The cost of compensatory payments to the government, for example, would be prohibitive. Second, with highly perishable items there is no practical alternative to outright purchases. Third, a well designed government purchase program can encourage better

marketing, which in turn can stimulate consumption and hence reduce the need for price supports.²

The government will dispose of its purchases in the following ways:

(a) By giving commodities to the school lunch program, prisons, and organized welfare groups.

(b) Through foreign aid programs such as feeding starving East Germans. Commodities going to foreign countries should not be “dumped” but should be used in a manner that helps carry out the over-all foreign policy.

(c) By stockpiling. Stockpiling is interpreted as storing in the national interest. It is often assumed that perishable products cannot be stored. Yet practically all so-called perishable products can be made storable through some kind of processing.

(d) By selling on the world market at a price below the purchase price. Dumping should not be practiced, but it may be possible to work out agreements for several commodities similar to the International Wheat Agreement.

(e) By selling domestically. Products cannot be sold below purchase price plus any costs incurred by the government in handling the product. Such a provision is necessary to prevent individuals from selling to the government and buying back later at a lower price.

(f) By diverting products to secondary uses. An example is diverting peanuts to oil. Products can be diverted to secondary uses only when the secondary product is selling above support prices.

(g) By destruction. Undoubtedly some products must be destroyed. A public relations program showing the nature of agricultural supply and demand and the small cost of insuring abundant food and fiber will be necessary to make destruction acceptable to the public. Also, the public should realize that considerable destruction takes place when there is an over-production of perishable products and there is no support program. The real questions are whether the government's bearing

²Several examples of government purchases improving marketing and, hence, consumption are given in the report prepared for the 82nd Congress called “Price Supports for Perishable Products . . . A Review of Experience.”

the cost of the destruction is in the long-run public interest and whether its purchasing the overproduction will result in more or less destruction. It is quite possible that the government's purchasing a share of the crop will result in less total destruction, as the government has more means for disposing of the surplus than the individual producer or private purchaser. Over the long run the public must pay for the destruction, regardless of whether the destruction be carried out by producers, purchasers, or the government.

(2) When the price of a particular commodity drops to 75 percent of the parity price, farmers may vote for production controls. The question can be raised as to why production controls are employed. Why not let flexible supports handle the allocative job? We feel that production controls are necessary and desirable under some conditions.

When there is general overproduction, and not just overproduction of a few commodities, low prices do not restrict output in a reasonable period of years. There is even indication that farmers increase output when prices fall in an effort to maintain income. In the long run farm production would decrease due to low prices. In the meantime the agricultural plant would deteriorate, and farm people would suffer low incomes. We suggest that these conditions are not in the public interest.

Even if farmers are willing to adjust production to changing prices, several years may be required to make the adjustment. Farmers cannot even restrict production, in the same sense as industry, within a production period. The addition of new enterprises may require years.

Production controls would take the form of restricting the sales volume of each farmer producing that commodity, and would not be converted into acreage allotments. In other words, farm marketing quotas would be established in terms of bushels or pounds, and not in terms of acreages or numbers. The farm quotas will be figured from the national marketing quota by breaking this over-all figure down by states, counties, and farms. Individual farm marketing quotas will be established on the basis of the average production of the farm during the last five years.

Marketing quotas have several advantages over acreage or number allotments. First, it is the only way to really control

production. Second, cost of administration will be less than under other methods. Each producer will be given tickets indicating the quantity that can be sold. The tickets will be collected by the person to whom the farmer sells. When the farmer disposes of all his tickets, he can market no more unless tickets can be purchased from another producer. Third, marketing quotas would not be capitalized into land values to the same extent as acreage allotments. Fourth, marketing quotas would permit producers more nearly to attain the optimum farm organization than would acreage allotments. Fifth, by determining quotas for the individual unit on the basis of production for the past five years, farmers who have been obtaining high yields receive credit for their efforts, knowledge, and comparative advantage.

The procedure for establishing marketing quotas is the familiar one of having the Secretary of Agriculture call for a referendum when prices drop to the 75 percent level. However, farmers will vote for the marketing quotas for one year only.

When farmers vote, they will have several alternatives from which to choose. They can vote against controls, in which case support prices may follow the formula until they reach 60 percent of parity. On the other hand, they can vote to restrict production to a level which should bring prices (and the government will guarantee farmers getting these prices) to either 75, 80, 85, or 90 percent of parity. Discretion will have to be used by the government in determining the levels of production which should bring prices to the desired level. A reasonable excess (5 to 10 percent) of expected actual consumption at the stated price must be included in the quota to protect consumers in case of low yields. The excess is particularly important in this program as it is assumed that individual farm marketing quotas will actually control production, whereas acreage allotments will not strictly control production.

Marketing quotas will be made transferable. Making quotas salable has several advantages over not allowing the quota or allotment to be sold. First, such a procedure enables those individuals and areas which have lower than normal production to realize additional income. Of course, a producer would not deliberately underproduce unless he intended to go out of production, as the small production would tend to lower the quota for the farm in succeeding years. Second, making quotas salable

should encourage shifts among areas and farms which can produce the product most efficiently. Marginal producers could sell the quotas, realize some income from them, and either move out of agriculture or begin producing other products. Those farmers purchasing quotas would tend to get larger quotas in succeeding years, while those selling would get less.

The actual sale of marketing quotas or parts of quotas should not prove difficult. The government could set a price, as it did for cotton gin tickets in the thirties, or the market could be allowed to set the price. The authors favor the latter system. Of course, a record must be kept of those who buy and sell to help determine quotas in future years; the name and address of the seller should appear on the tickets; and the buyer should be held responsible for recording the transaction.

APPRAISAL OF THE PROGRAM

In making an appraisal, some yardstick must be used. The yardstick in this case will be eight criteria which have been used by several individuals who have appraised price-support programs. The eight criteria are:

1. Provide reasonable price stability for the commodity and help maintain over-all economic stability.
2. Maintain supply in line with demand within a reasonable range of short-run price fluctuations and over time.
3. Encourage efficient production and marketing.
4. Encourage capital and labor resources to shift to employment which gives higher returns.
5. Encourage resource conservation.
6. Be politically acceptable and administratively feasible.
7. Be consistent with other policies of the nation.
8. Provide for distribution of costs and benefits in line with public welfare goals.

It should be recognized that the proposed program will not satisfactorily meet all of the criteria. The real question is whether the proposed program more nearly meets the criteria than alternatives, including "no program."

How does the proposal stack up?

(1) **PROVIDE REASONABLE PRICE STABILITY FOR THE COMMODITY AND HELP MAINTAIN OVER-ALL STABILITY.** The program provides reasonable price stability. When compared with a free market, the proposal provides considerable stability as fluctuations of as much as 50 percent are not uncommon in the free market. Production has varied much less than price, which is the consequence of an inelastic demand. As the level of price support is tied to production, the support price will seldom vary as much as 10 percent. Complete price stability would conflict with several other criteria, particularly numbers 4 and 8.

The proposal should contribute to over-all economic stability in several ways. When the general price level is declining and unemployment increases, government payments would increase, which would help to stabilize the general price level. It is recognized that payments to farmers will not provide the same boost to the general price level as payments in some other segments of the economy, but the payments will help. Raising support prices when production is low should encourage production. An increase in production is particularly effective in preventing price increases when the demand is inelastic.

(2) **MAINTAIN SUPPLY IN LINE WITH DEMAND WITHIN A REASONABLE RANGE OF SHORT-RANGE PRICE FLUCTUATIONS AND OVER TIME.** It is recognized that supply will always come in line with demand at some price. With an inelastic demand the price can vary widely, however. The question is whether the program will, with the exception of variations in supply due to factors beyond the farmer's control, keep supply in line with demand within a reasonable price range. The program will not insure production being in line with demand in a given year. It is doubtful if any pricing plan will accomplish such a goal in the short run even if unforeseen variations in supply are excluded. The supply function is simply too complicated and too inelastic. Demand can also change in an unpredicted direction and at an unpredicted rate. With considerable time being necessary to change supply, price is likely to vary due to the demand factor. The proposal, particularly with the production control provisions, should maintain supply in line with demand within a reasonable price range. Certainly the cost of maintaining reason-

able price stability would be lower than under most alternative proposals, and particularly fixed high-level supports.

In the long run the proposal should do a reasonably good job of adjusting supply to demand at a reasonable price. The 60 to 90 percent of parity range should be sufficient, if price has any influence on production, either to decrease or increase supply to meet the changing demand.

(3) **ENCOURAGE EFFICIENT PRODUCTION AND MARKETING.** The proposal reduces uncertainty, which should lead to more efficient production. On many farms additional capital is needed. The reduction in uncertainty plus the increase in income derived from the program should encourage investment. The flexible supports should also help farmers to arrive at the optimum product combination. The government could materially improve marketing through its purchase program.

On the other hand, the marketing quotas may reduce the incentive for higher per unit yields. Also the marketing quotas may tend at times to prevent farmers from changing production plans. They will not provide as much of a "brake" on shifting production as acreage allotments.

(4) **ENCOURAGE CAPITAL AND LABOR TO SHIFT TO EMPLOYMENT WHICH GIVES HIGHER RETURNS.** As previously indicated, the proposal should encourage the addition of capital. On most farms capital earns higher returns than alternative investments. The program should help move labor out of agriculture to higher paying employment. If the quantity of production which is needed is known and prices stabilized, farm labor can effectively compare earnings in agriculture with alternative employments. A relatively stable situation should also encourage an orderly shift of labor out of agriculture, which is desirable. It must be remembered that a desperate situation is not compatible with moving labor out of agriculture. A bankrupt man cannot shift without some kind of direct assistance.

(5) **ENCOURAGE RESOURCE CONSERVATION.** The proposal will encourage conservation in at least three ways: (a) uncertainty will be reduced, (b) farm income will likely be higher than it would be if there were no supports, and (c) the adjustments should be more orderly than under free prices.

The proposal would in no way discourage conservation.

(6) **BE POLITICALLY ACCEPTABLE AND ADMINISTRATIVELY FEASIBLE.** While the program will be difficult to administer, it should be no more difficult for a particular commodity than the present program. Of course, as all commodities are included in the proposal, the administrative job will be larger. The proposal should not be as difficult from an administrative standpoint as the Brannan Plan and other programs involving compensatory payments.

Several parts of the program are not readily acceptable. There is some question as to whether farmers will accept flexible supports. This is particularly true if the so-called "basics" are included in the proposal. The consumer would probably prefer no support program. The consumer does not like destruction of food and fiber, and destruction is involved in the proposal.

(7) **BE CONSISTENT WITH OTHER POLICIES OF THE NATION.** No proposal can be consistent with all other policies, for many of them are inconsistent. The proposal does contribute to over-all economic stability. It provides some security for farmers and, hence, is consistent with the over-all policy of providing reasonable security to everyone. To the extent that farmers are a low-income group, it is consistent with the policy of equalizing incomes. The proposed program could help implement our foreign policies.

It is inconsistent with the goal of maximum freedom for the individual and, to some extent, with the goal of promoting freer world trade, but is superior to many alternatives in this respect.

(8) **PROVIDE FOR DISTRIBUTION OF COSTS AND BENEFITS IN LINE WITH PUBLIC WELFARE GOALS.** The proposal will undoubtedly entail cost to the government. In some years, even when there is not a depression, the cost will be high. The cost to the government could well be greater than has been experienced to date. Yet the cost is not likely to be as high as the present program would be if it included all commodities. If depression years are excluded, over a period of time, the cost should not be higher than the cost of the present program.

TABLE 1. ACTUAL PRICE (SEASON AVERAGE) AS PERCENT
OF EFFECTIVE PARITY PRICE
(Current Formula for Each Year)

Commodity	1947	1948	1949	1950	1951	1952
<i>Percent</i>						
BASICS						
Cotton	111.5	97.6	94.4	129.3	112.0	91.3
Wheat	112.8	89.6	86.6	90.5	87.2	84.2
Corn	142.1	80.6	80.0	93.3	96.6	83.3
Peanuts	90.1	87.5	88.9	90.8	79.4	82.9
Tobacco, types 11-14	92.8	101.6	100.0	109.4	93.1	92.3
DESIGNATED NONBASICS						
Potatoes	101.3	83.6	69.4	51.0	89.4	132.0
Butterfat, in cream	117.1	113.3	91.0	98.3	93.2	92.5
All milk, wholesale	114.5	113.8	91.4	101.3	100.0	98.3
Honey, comb	115.6	95.6	88.4	100.0	91.9	
OTHERS:						
<i>Livestock and Products</i>						
Beef cattle	160.9	166.9	141.0	179.2	159.4	115.6
Hogs	145.2	128.3	101.1	103.4	100.5	94.5
Eggs	81.8	74.7	70.3	70.3	89.7	96.4
All chickens	104.4	115.8	94.3	90.9	89.7	83.6
Turkeys	108.0	132.6	101.2	94.8	97.9	85.4
Veal calves	141.7	147.9	135.9	162.3	158.4	109.8
<i>Vegetables, Fresh</i>						
Lima beans	85.2	83.0	69.3	63.2	73.5	93.6
Snap beans	84.9	83.6	75.1	78.2	83.9	103.4
Cabbage	150.2	88.9	93.2	79.2	118.3	137.4
Cantaloups	140.3	103.1	95.5	90.4	85.2	100.8
Lettuce	136.9	117.1	137.5	101.1	89.0	92.1
Onions	132.3	76.4	86.0	53.4	84.4	132.4
Green peas	80.6	69.7	68.4	71.3	70.7	74.6
Green peppers	121.9	86.2	86.2	78.5	90.2	110.5
Spinach	109.4	94.1	101.2	116.0	107.7	109.2
Tomatoes	115.5	104.6	95.4	112.1	101.2	110.7
<i>Fruits</i>						
Grapefruit	16.9	31.3	81.9	45.4	29.2	45.0
Oranges	27.5	38.6	53.3	44.6	27.9	41.3
Apples	81.0	92.1	58.7	60.0	61.9	100.0
Blackberries	100.0	80.0	83.3	112.0	110.6	71.9
Peaches, fresh	72.1	80.6	62.7	92.4	78.6	80.9
Figs, dried	79.9	84.7	108.3	117.4	71.7	58.7
Strawberries, fresh	142.1	133.1	122.7	122.5	77.3	86.2
<i>Sugar Crops</i>						
Sugar beets	111.1	94.2	99.0	91.9	88.4	94.7
Sugar cane	94.3	73.6	81.7	100.0	79.7	96.2

TABLE 2. MONTHLY PRICES, PERCENT VARIATION FROM YEARLY PRICE, AND SUPPORT PRICE AS PERCENT OF PARITY FOR 1953

Month	Eggs			Potatoes		
	Average Price 1948-52	Percent Variation from Yearly Average	Support Price 1953	Average Price 1948-52	Percent Variation from Yearly Average	Support Price 1953
January	42.0	- 3.7	86.7	1.59	+ 3.9	93.5
February	38.5	-11.7	79.5	1.61	+ 5.2	94.7
March	38.6	-11.5	79.6	1.65	+ 7.8	97.0
April	38.8	-11.0	80.1	1.71	+11.8	100.6
May	38.8	-11.0	80.1	1.73	+13.1	101.8
June	39.6	- 9.2	81.7	1.79	+17.0	105.3
July	43.1	- 1.1	89.0	1.67	+ 9.2	98.3
August	46.8	+ 7.3	96.6	1.64	+ 7.2	96.5
September	49.6	+13.8	102.4	1.47	- 3.9	86.5
October	51.0	+17.0	105.3	1.43	- 6.5	84.1
November	51.9	+19.0	107.1	1.51	- 1.3	88.8
December	49.7	+14.0	102.6	1.53	0	90.0
Five-year average	43.6		90	1.53		90

TABLE 3. EXPLANATION OF THE SUPPORT PROGRAM FOR 1954 FOR POTATOES

Supply in 1953	Acreage Goal 1953 (000 acres)	Acreage 1953 (000 acres)	Yield 1953 (bu.)	Production 1953 (000 bu.)	Government Purchases (000 bu.)	Production Goal 1954 (000 bu.)	Average Yield 1949-53 (bu.)	Acreage Goal 1954 (000 acres)	Support Price 1954 (percent)
<i>Demand in 1953 Same as in 1952</i>									
1. Acreage goal reached, yield normal	1,567	1,567	239	374,513		374,513	242	1,548	90
2. Acreage goal reached, yield 10% above normal	1,567	1,567	263	412,121	37,608	374,513	246	1,522	90
3. Acreage goal reached, yield 10% below normal	1,567	1,567	215	336,905		336,905	236	1,428	90
4. Acreage goal overplanted by 10%, yield normal	1,567	1,724	239	412,036	37,523	374,513	242	1,548	80
5. Acreage goal overplanted by 10%, yield 10% above normal	1,567	1,724	263	453,412	78,899	374,513	247	1,516	80
6. Acreage goal overplanted 10%, but yield down to extent that total production same as 1952	1,567	1,724	217	374,513		374,513	237	1,580	90
7. Acreage goal 10% underplanted, yield normal	1,567	1,410	239	336,990		336,990	242	1,393	90
8. Acreage goal 10% underplanted, yield high enough to give same total production as 1952	1,567	1,410	266	374,513		374,513	247	1,516	90

TABLE 3. EXPLANATION OF THE SUPPORT PROGRAM FOR 1954 FOR POTATOES—Continued

Supply in 1953	Acreage Goal 1953 (000 acres)	Acreage 1953 (000 acres)	Yield 1953 (bu.)	Production 1953 (000 bu.)	Government Purchases (000 bu.)	Production Goal 1954 (000 bu.)	Average Yield 1949-53 (bu.)	Acreage Goal 1954 (000 acres)	Support Price 1954 (percent)
9. Farmers exceed goal by 10%, yield normal	1,567	1,724	239	412,036		412,036	242	1,703	90
10. Farmers exceed goal by 15%, yield normal	1,567	1,802	239	430,678	18,674	412,036	242	1,703	86
11. Farmers exceed goal by 15%, yield 10% above normal	1,567	1,802	263	473,926	61,890	412,036	247	1,668	86
12. Farmers exceed goal by 15%, yield below normal to extent that production moves at support price	1,567	1,802	229	412,036		412,036	239	1,724	90
13. Farmers plant goal, yield normal	1,567	1,567	239	374,513		374,513	242	1,548	90
14. Farmers plant goal, yield 10% above normal	1,567	1,567	263	412,121	85	412,036	246	1,675	90
15. Farmers plant goal, yield 10% below normal	1,567	1,567	215	336,905		336,905	236	1,428	90
16. Acreage goal underplanted 10%, yield normal	1,567	1,410	239	336,990		336,990	242	1,393	90

17. Acreage goal underplanted 10%, yield 10% above normal	1,567	1,410	263	370,830	370,830	246	1,507	90
18. Acreage goal underplanted by 10%, yield 10% below normal	1,567	1,410	215	303,150	303,150	237	1,279	90
<i>Demand in 1953 10% Lower Than in 1952</i>								
19. Acreage goal planted, yield normal	1,567	1,567	239	374,513	374,513	242	1,393	90
20. Acreage goal planted, yield 10% above normal	1,567	1,567	263	412,121	75,059	246	1,370	90
21. Acreage goal planted, but yield so low that production just moves at support price	1,567	1,567	215	337,062	337,062	237	1,422	90
22. Acreage goal overplanted by 10%, yield normal	1,567	1,724	239	412,036	74,974	242	1,393	80
23. Acreage goal overplanted by 10%, yield 10% above normal	1,567	1,724	263	453,412	116,350	247	1,365	80
24. Goal underplanted 10%, yield normal	1,567	1,410	239	336,990	336,990	242	1,393	90
25. Goal underplanted 10%, yield 10% above normal	1,567	1,410	263	370,830	33,763	246	1,370	90
26. Goal underplanted 10%, yield 10% below normal	1,567	1,410	215	303,150	303,150	237	1,279	90
27. Goal underplanted 15%, yield normal	1,567	1,332	239	318,348	318,348	242	1,315	90

TABLE 4. EXPLANATION OF THE SUPPORT PROGRAM FOR MILK FOR THE YEAR ENDING MARCH 1955

Supply in 1952-53	Cow Goal 1953-54 (000)	Actual Cow Number 1953-54 (000)	Yield 1953-54 (lbs.)	Production 1953-54 (000,000 lbs.)	Government Purchases 1953-54 (000,000 lbs.)	Production Goal 1954-55 (000,000 lbs.)	Average Yield Years Ending 1950-54 (lbs.)	Number Goal 1954-55 (000)	Support Price 1954-55 (percent)
<i>Demand in 1953-54 Same as in 1952-53</i>									
1. Number goal reached, yield normal	20,672	20,672	5,326	110,100		110,100	5,320	20,695	90
2. Number goal reached, yield 10% above normal	20,672	20,672	5,860	121,137	11,037	110,100	5,422	20,306	90
3. Number goal reached, yield 10% below normal	20,672	20,672	4,793	99,081		99,081	5,217	18,991	90
4. Number goal exceeded 10%, yield normal	20,672	22,739	5,326	121,108	11,008	110,100	5,320	20,695	80
5. Number goal only 90% reached, yield normal	20,672	18,605	5,326	99,090		99,090	5,320	18,262	90
<i>Demand in 1953-54 10% Higher Than in 1952-53</i>									
6. Number goal exceeded 10%, yield normal	20,672	22,739	5,326	121,108		121,108	5,320	22,765	90
7. Number goal exceeded 15%, yield normal	20,672	23,773	5,326	126,615	5,505	121,110	5,320	22,765	86
8. Number goal reached, yield normal	20,672	20,672	5,326	110,100		110,100	5,320	20,695	90
9. Number goal only 90% reached, yield normal	20,672	18,605	5,326	99,090		99,090	5,320	18,626	90

Demand in 1953-54 10% Lower Than in 1952-53

10. Number goal reached, yield normal	20,672	20,672	5,326	110,100	11,010	99,090	5,320	18,626	90
11. Number goal exceeded 10%, yield normal	20,672	22,739	5,326	121,108	22,018	99,090	5,320	18,626	80
12. Number goal only 90% reached, yield normal	20,672	18,605	5,326	99,090		99,090	5,320	18,626	90
13. Number goal only 85% reached, yield normal	20,672	17,571	5,326	93,583		93,583	5,320	17,590	90