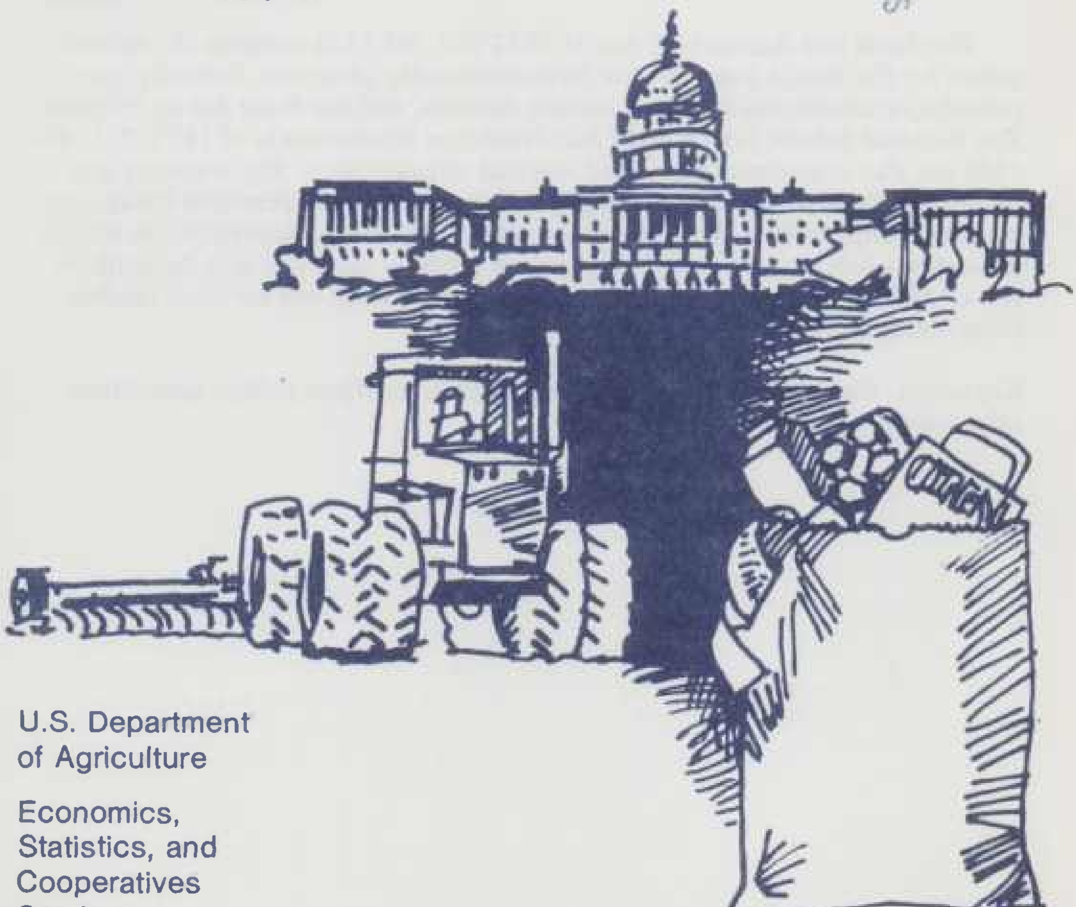
A GUIDE TO UNDERSTANDING THE 1977 FOOD AND AGRICULTURAL LEGISLATION

Thomas A. Stucker
William T. Boehm



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ABSTRACT

The Food and Agriculture Act of 1977 (P.L. 95-113) contains the authorization for the next 4 years for the farm commodity programs, federally supported agricultural and human nutrition research, and the Food Stamp Program. The National School Lunch and Child Nutrition Amendments of 1977 (P.L. 95-166) are also concerned with food use and consumption. The meaning and potential effects of the 1977 legislation are described. The principal focus is on consumer implications. The theoretical aspects of policy alternatives are briefly presented when useful in explaining policy goals of the Food and Agriculture Act of 1977. Changes since enactment are *not* included, nor are their implications discussed.

Keywords: Food and agricultural policy, human nutrition policy, agricultural price supports, Food Stamp Program.

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SUMMARY

Food and agricultural legislation developed in 1977 will significantly affect both consumers and producers through 1981, when the legislation expires. The legislators outlined price and income supports for producers and revised the Food Stamp Program, which may increase food consumption by low-income households. The commodity provisions of the Food and Agriculture Act of 1977 were developed using the traditional approach to farm policy, but budgetary considerations and consumers were important influences in the congressional debate.

The act contains reforms for farm commodity programs, federally supported agricultural and human nutrition research, and the Food Stamp Program. The legislation seeks to reform and improve farm and food programs without abandoning the existing policy framework. The implications of this are:

- Commodity programs will continue to benefit the traditional recipients, and the amount of benefit will depend on the support *levels*. Program support levels, and thus costs, are increased.
- The basic food stamp format for domestic food aid continues, but some of the provisions have been altered. For example, participants no longer must purchase food stamps, a change which may bring as many as 2.3 million eligible participants into the program.

Major areas reformed by the National School Lunch Act and Child Nutrition Act, also amended in 1977, are the Summer Food Service Program and the distribution of commodities to schools. The potential for fraud has been reduced, and the untimely delivery of unusually large quantities of specific commodities has been eliminated.

Research provisions for agriculture and human nutrition could have the most significant longrun effects on U.S. food policy. Increasing emphasis on human nutrition research may provide information about the adequacy of diets, food safety, and other factors leading to future changes in basic policy as well as program implementation.

Only food and agricultural legislation enacted in 1977 is included in this report. Provisions relating to the operation of the commodity support programs, in particular, have been changed since the Food and Agriculture Act of 1977 was signed into law. These changes do affect both the actual program rules and the levels of support. However, the effect of these ongoing changes is neither discussed nor analyzed in this report.

CONTENTS

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Agricultural Economists

INTRODUCTION

New Food and Agriculture Legislation

The Food and Agriculture Act of 1977 is the latest in a series of acts (3 to 4 years in duration) generally referred to as "farm bills." These bills modify and restate food and farm programs. Companion legislation which affects the operation of the federally funded food and nutrition programs is often enacted during the same congressional session because of its effect on food consumption and its implications for Government commodity stocks. These acts have always been of significant interest to farm constituents, but a growing cognizance of their importance to all food consumers has developed in recent years, especially since the early seventies. This growing awareness of the interaction among the farm sector, national health and nutrition, and domestic economic programs underscores a recognition of the need to comprehend the entire food system, including its physical and economic characteristics.

Many discussions of the past "farm bills" have appeared, but seldom have the bills been discussed with respect to their overall implications for either the food system or American consumers. This report is an attempt to do just that.

The major provisions of both the Food and Agriculture Act of 1977 (which includes the Food Stamp Act of 1977) and the National School Lunch and Child Nutrition Amendments of 1977 are described. The sometimes complicated provisions of each major piece of food policy legislation are explained in an effort to improve general understanding. Those wanting more complete statements of specific provisions are referred to other publications[1] or to the bills themselves (*5*, *6*).[2] The purpose here is to use the opportunity provided by passage of new legislation (1) to give an overview of Government involvement in the food producing and food aid areas and (2) to provide sufficient background, theory, and implications to improve overall *understanding* as well as technical knowledge of the 1977 legislation.

Setting

With the passage of the Food and Agriculture Act and the Child Nutrition and School Lunch Amendments of 1977, U.S. agricultural policy has evolved closer to a statement of an integrated national food policy. The change was not so great as anticipated or desired by some proponents, as commodity support levels continued to be the principal focus of the debate. (Legislative changes related most often to programs, and not to changes in the policy framework.) Good weather and, therefore, a relatively abundant wheat crop had resulted in market prices for wheat below the national average cost of production during the period of debate on the bill. This situation, coupled with low farm prices generally,

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[1] A recent review by Johnson and Ericksen, entitled "Commodity Program Provisions Under the Food and Agriculture Act of 1977," defines all commodity provisions of the act (*2*).

[2] Italicized numbers in parentheses refer to items in the References.

provided much of the impetus for focusing the debate on increasing the levels of farm income and price supports.

New legislation was needed because several of the key laws pertaining to food and agriculture were set to expire in 1977:

1. The 1973 Agriculture and Consumer Protection Act,
2. The 1964 Food Stamp Act (as amended),
3. The Agricultural Trade Development and Assistance Act (P.L. 480),
4. The Rice Production Act of 1975, and
5. The Summer Food Service Program for children.

If the commodity provisions of the 1973 act had been allowed to expire without replacement, "permanent" legislation would have come into effect. This alternative encouraged lawmakers to develop new legislation which could retain the target price and loan rate concepts from the 1973 act, generally considered to be far more "in tune" with the current situation.

Substantial changes were made in the Food Stamp sections of the 1977 act. The requirement that most participating households pay some of their earned income for coupons was eliminated. Households eligible for aid will now receive, free of any charge, the difference between the total value of the authorized allotment (based on the cost of the Thrifty Food Plan)[3] and 30 percent of household net income. Key features of the new act simplify Food Stamp Program (FSP) administration and reduce the potential for fraud. Budget considerations were also a major part of the food aid sections of the "omnibus" bill. Expenditure ceilings were enacted to hold FSP costs close to the expected FY 77 levels.

The National School Lunch and Child Nutrition Amendments of 1977 may generally be regarded as reform legislation—attempts to correct administrative problems with several of the food programs. However, these amendments do place a new emphasis on integrating the farm and food programs. Key provisions relate to extension of the Summer Food Service Program for children and improved use of commodity distribution of the National School Lunch Program (NSLP). The role of nutrition education is also emphasized.

While budget considerations were central to each of these debates, the mood for an integrated national food policy was evident. More concern for interdependent and interrelated forces was expressed. We turn now to specific provisions to indicate just how the legislation has changed.

COMMODITY PROGRAMS AND FOOD PRICE STABILITY

Issues

The history of Government programs to support agricultural income may be traced to 1929, when the Federal Farm Board was formed as an initial attempt by the Government to intervene directly in production and marketing decisions. Farm price supports have been retained over the years because they are believed to benefit both producers and consumers. Producers benefit from price and income supports, and consumers benefit from ample supplies of food at "reasonable" prices.

Two arguments have frequently been used to justify Government involvement in farm price stabilization. First, food is a human necessity, and therefore essential to the Nation's well-being. Most policymakers believe that some level of "food security" is necessary for national economic and political stability. Since agriculture is an industry in which supply response to price signals may require months, or even years, producers may be forced out of the industry by low returns unless some Government program is available to sustain them during periods of low farm prices. That is, the time lag required for a supply response may cause the result to occur in a period in which conditions have already changed. The industry might then be left unable to expand production rapidly enough to meet those food needs which might develop.

The other argument which has been made for careful maintenance of a healthy agricultural

[3] The Thrifty Food Plan is the least costly of the four diets developed by the Agricultural Research Service (now a part of the Science and Education Administration). It was developed somewhat as a "norm," that is, "thrifty" households can purchase nutritionally adequate diets if they follow the plan.

sector is "food power." This term was popularized in response to growing recognition of the importance of food in the *world* economy. Just as petroleum is an important resource upon which our civilization relies, resources to produce food are valuable in the international realm. Our national balance of trade and our wealth depend to some extent on agricultural exports. Whereas the nonagricultural trade balance was negative from 1971 to 1975, the agricultural trade balance was positive, contributing $21.9 billion in exports in 1975.

Once a healthy agricultural sector is accepted as essential to the Nation's well-being, the question is how best to ensure that the objective of maintaining it is accomplished. The relevant alternatives at this juncture in time have been depicted by some policymakers as treating agriculture as (1) a "public utility" with a guaranteed rate of return to producers (price floors) but with price ceilings to protect consumers, or (2) a market-oriented sector with only risk protection (*3*). The pendulum of agricultural policy has swung from heavy reliance on price floors in the fifties and sixties to nearly total market orientation in the early seventies. Now, because conditions are changing, it is swinging back to a heavier reliance on Government.

The results generated by these Government policies seldom match the expectations of those who implement them. In the past, heavy reliance on price floors has been associated with costly Government commodity storage outlays and chronically low grain prices. A greater market orientation sometimes resulted in high market uncertainty and unstable grain prices. In 1977, the search was for a "happy medium." Important factors in achieving the optimum result are the type of farm supports used and the levels at which they are set.

In the new law, farm incomes are supported through two basic mechanisms:

1. *A market price support* (loan rate)—A loan program is available to producers of eligible commodities (wheat, feed grains, upland cotton, soybeans, rice, and peanuts). Under this program, producers may place any portion of their production in approved storage and receive a "loan" from the Government. The amount loaned is equal to the loan rate times the quantity placed under loan as collateral. At the end of the loan period (9-12 months with extensions optional), the farmer may choose to either (a) repay the loan with interest and retain possession of the commodity, or (b) forfeit the stored commodity as payment for the loan. Producers also now have the choice of entering into a 3-year Food or Feed Grain Reserve contract. In this way, the loan rate serves as a floor price for the commodity. When market prices dip below the loan rate, farmers can simply put the commodity under loan. Diverting some production from the market system through the loan program obviously puts upward pressure on prices.
2. *A farm income support* (target or "established" prices)—The target price concept is used as a basis for making direct income support payments to farmers. These payments vary inversely with the market price of the specified commodity. "Deficiency payments" are made when market prices for a specified period in the marketing year are below the target price. The payment rate is the difference between the target price and market price, or between target price and loan rate, whichever is smaller.

   Deficiency payments, unlike nonrecourse loans, are available only for normal production from farm program acreage.[4] One important aspect of farm income support via direct payments is that commodity market price is not enhanced by the program. Under this support method, any increases in farm income are derived from Government outlays, not from increased market prices for food.

Operation of the target price and loan rate provisions may be illustrated using three situations:[5]

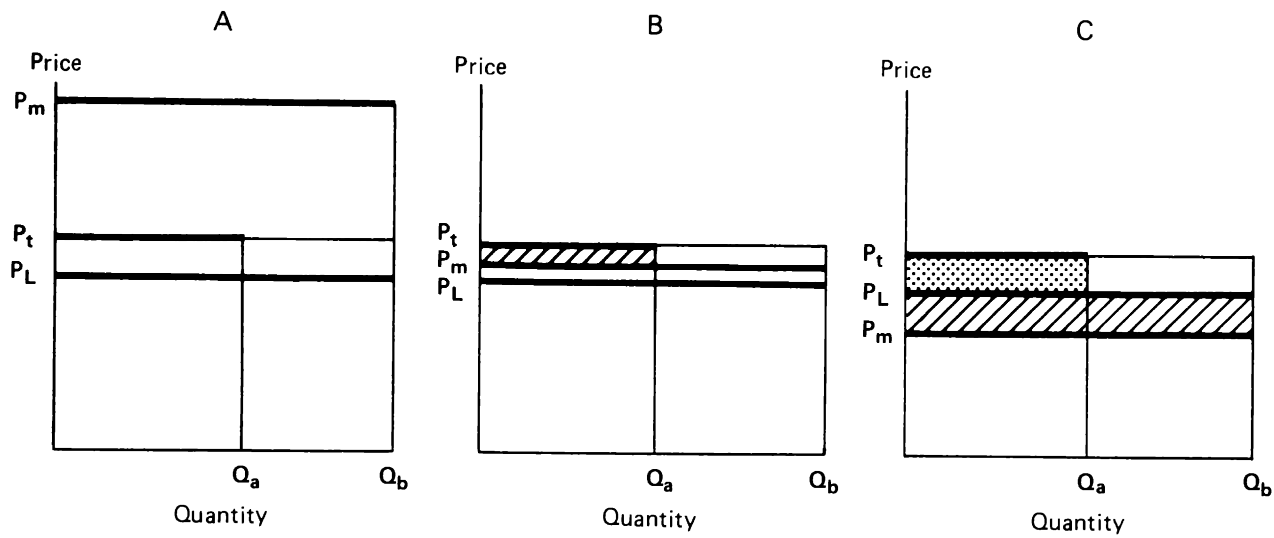
A. *Market price above target price and loan rate levels.*[6] This is illustrated in the left panel of figure 1, which indicates no

[4] The 1977 act refers to "program acreage" determined to meet domestic, export, and carryover needs. An allocation factor based on national harvested versus program acreage is used to calculate individual farm program acreage.

[5] See (*4*).

[6] This refers to market price for a specified period: first 5 months of the marketing year for crops other than cotton, for which the period is the calendar year.

OPERATION OF TARGET PRICE AND LOAN RATE CONCEPTS



P_m = average market price

P_t = target price

P_L = loan rate

Q_a = production from program acreage

Q_b = total production

Figure 1

deficiency payments would be made and producers would elect to dispose of their products in the "open" market at the higher price (P_m).

B. *Market price below the established target price but substantially above the loan rate level.* This is depicted in the center panel of the figure. Deficiency payments would be based on the difference between the target price and the market price times the quantity of production eligible $(P_t - P_m) \times Q_a$.

C. *Market price below both the target price and loan rate levels.* As shown in the right panel of the figure, deficiency payments of $(P_t - P_L) \times Q_a$ would be made. Producers would likely elect to place commodities in the nonrecourse loan program. If unredeemed, the price received for the product would be the loan rate on all production placed under loan (Q_b) plus the additional deficiency payment on the normal production from the allotted acreage (Q_a). (In actuality, the loan rate becomes the floor price, and the market price is unlikely to fall much below it.)

The target price and loan rate concepts first included in the 1973 act are extended by the 1977 act through 1981, with provision for adjustments in their levels. The method of computing program acreage is changed, however. This provision and others are discussed later in this report.

Implications

What impact the 1977 Food and Agriculture Act will ultimately have on ". . . the farm sector, the Federal budget, consumers, and the domestic economy will be influenced by two key determinants—the use of discretionary authority by the administration and uncertainty of weather and export demand" (*10*). As the situation currently appears, income transfers to the farm sector will be increased over those made under the 1973 act. Since distribution of these benefits is based on the amount produced, the larger farms will likely benefit most.

Although farmers are protected to a degree from downside price changes and processors/distributors are able to pass on their cost increases, consumers have no protection against price increases of any magnitude. Their only option is to buy substitute products, if available. This is the advantage of the direct payment "target" concept—market prices remain largely unaffected by Government action. Program costs are paid via the tax structure, which is progressive.

Program Impact

Deficiency payments associated with target prices provide a stabilizing effect on the price of food, as their impact is felt through the tax system rather than through the market system. However, if farmers hold the expectation that significant deficiency payments will continue in the future, they may incorporate that expectation into the prices they are willing to pay for inputs such as land. Prices of land and other inputs are then bid up as the demand for them increases. Thus, the end result of a target price scheme for the producer is much the same as a price support mechanism.

The difference between the income support and price support is the incidence of program costs; that is, with *price* supports (the loan program), consumers of the product pay for part of the support to agriculture through higher market prices. With a target price or *income* support scheme, taxpayers in general provide the program funds, and market price is not *directly* affected (although an indirect effect may actually result). The income support method has a redistributional effect (on the cost side) when operating in the context of the progressive U.S. income tax structure.

Loan levels, with the exception of sugar, are generally not set high enough in the 1977 act to have a significant effect on consumer prices.

The net effect of the direct payment (target price) method of farm income support can be shown with the aid of a simple diagram (fig. 2) analogous to the middle panel of figure 1.

In the absence of any program, the market would be cleared at the intersection of the supply and demand curves, at price P_{m1} and

IMPACT OF FARM SUPPORTS ON FARM INCOME AND GOVERNMENT OUTLAYS

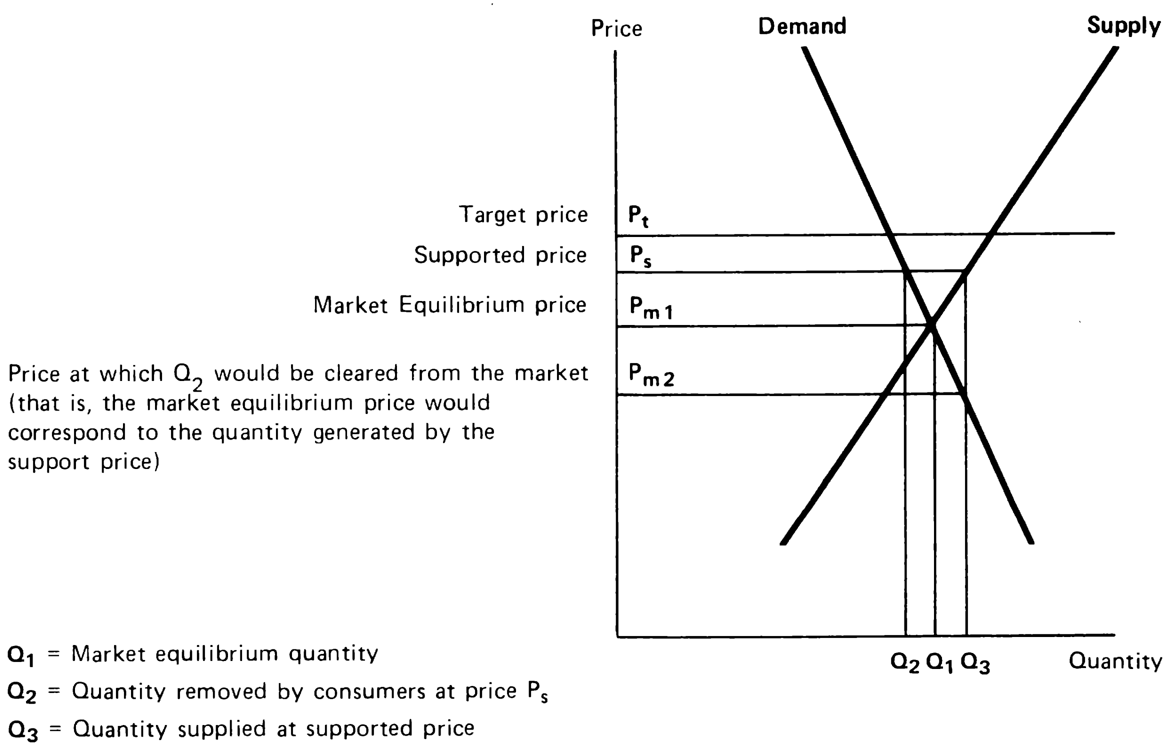


Figure 2

quantity Q_1. That is, consumers could be willing and able to pay P_{m1} to obtain Q_1 from the market. At the same time, farmers collectively would produce Q_1, anticipating that the price would be P_{m1}.

Suppose that $P_{m1} \times Q_1$ is, for whatever reason, a socially unacceptable level of farm income and that the Government has chosen to use the direct payment method to enhance that income.[7] The Government would announce *prior to planting* that the target price would be at a certain level (P_t). Since that target price is paid on only a *portion* of the production, farmers would expect to receive an average price per unit greater than P_{m1} but less than P_t. For purposes of discussion, it is assumed that farmers then expect to realize an average price per unit of P_s when the "average" support is included. In the expectation of that price, Q_3 units of the crop would be produced. But quantity Q_3 can only be removed from the market voluntarily by offering it to consumers at price P_{m2}.

Thus, while it is often thought that the direct payment system does not affect the market price of a product, the potential for such an effect through supply response is quite real. Farmers can be expected to make production decisions on what they expect to receive for their crop, regardless of the *source* of payment (Government or market). Consumers, on the other hand, can be induced to buy more of a particular product only when it is offered at a lower price.

The direct payment method of farm income support, therefore, has potentially important implications for consumers—particularly low-income consumers who allocate relatively high proportions of their total income to food. While the system allows for Government support when farm income is at socially unacceptable levels, it also effectively retards increases in food prices.[8] Such benefits, of course, are not free. Taxpayers must subsidize the income support to farmers which is computed as $(P_s - P_{m2}) \times (Q_3)$. The incidence of this cost may have income redistributional effects when used in conjunction with a progressive tax system.

Previous to the 1973 act, farm prices were supported by a system of loan rates or floor prices (rather than target prices) which were often linked to parity prices. The Government stood ready to remove from the market via loans and purchases a sufficient quantity of any supported crop to ensure a market price equal to a specified percentage of the parity price. The implications can be demonstrated by using figure 2. In this case, the Government uses nonrecourse commodity loans or purchases to support the price above the market equilibrium price P_{m1} at P_s. This can be done by removing quantity $Q_3 - Q_2$ from the market and adding it to Government stocks. This commodity stock may be used as a reserve, exported later or sold domestically, or simply held as a surplus stock. Government costs for the purchase are equal to $(Q_3 - Q_2) \times P_s$.

With this type of program, quantity produced is maintained at a level higher than market equilibrium through action of the floor price. This system has been criticized as inducing greater production and prolonging the oversupply problem which brought about its existence while accumulating Government stocks. These Government stocks grew to socially unacceptable and costly levels in the sixties. Furthermore, under such a scheme, prices to consumers are raised above equilibrium levels for the items supported.

The 1977 act includes both the target price and a loan rate concept (as did the 1973 act). Use of a loan rate in conjunction with the target price prevents market prices from falling too far from the target price. This limits outlays for deficiency payments, but increases the likelihood of loans, purchases, and higher short-term consumer prices. Either way, production is likely to be increased if farmers perceive the average unit receipts to be greater than the market price in the absence of any Government activity.

Legislation

The major commodity-oriented provisions of the 1977 act are discussed in this section. Highlights of the provisions are noted, and probable impacts are discussed. A later section deals with the domestic food aid programs.

Payment Limitations

The basic mechanics of agricultural price and income programs continue to link program

[7] It is assumed that any other support, such as a loan program, is not effective at the price levels shown (see fig. 1).

[8] The higher farm income is based on a *lower market price* for the larger quantity produced, plus the direct payment.

benefits to *production* and not to the "need" for additional income. Although this is "fair" on the basis of payment per unit produced, it has important implications for some farmers, in particular, and for society, in general. First, most of our public aid programs are based on a belief that income and wealth should be distributed among members of society in such a way as to avoid serious social divisions often caused by gross disparities. The support of welfare programs via the progressive income tax is a good example. Although some of the goals of agricultural programs are clearly different,[9] the programs have tended not to redistribute income to poor farmers. In fact, clearly one reason poor farmers are poor is because they do not produce very much agricultural output. Thus, when agricultural income support programs are based on production, they should not be expected to direct resources to the rural poor, who may need help most.

Data from the 1974 Census of Agriculture may be used to illustrate the point. Those data show that a very small proportion of the total number of farms produce a very large proportion of the total agricultural output. The 19 percent of farms in the commercial farm group produces over 78 percent of all the Nation's food and fiber. The smallest farms, 55 percent of the total, produce only 5 percent of the total output. Thus, when deficiency payments are made to agricultural producers based on their production, it is only logical to expect that the largest proportion of Government outlays will go to the larger producers. Although payment limitation provision limits the amount of Government support going to the very large producers, it does nothing to increase income support to the smallest producers (those presumably most in need).

The structure of American agriculture has historically been viewed as a model of perfect competition. A large number of relatively small producers are "price takers" because each alone is too small to perceptibly influence aggregate supply of their undifferentiated product. Maintenance of this structural arrangement is enthusiastically supported by many because it preserves farming as a "way of life" while simultaneously, they believe, encouraging producers to reduce per unit costs to maximize individual profits. In fact, economies of size attainable in agriculture today, largely related to substitution of mechanical technology for labor, tend to increase the average size of production units.[10]

A change in the production unit ownership arrangements, as has already occurred in heavy industry, might also be expected to change the structure of agriculture from a large number of small price-takers to a few large price-setters. This is considered by many, including some members of the Congress, as socially undesirable, particularly in an essential industry such as food production. The program payment limit may be perceived as an example of legislation favoring small producers.

To preclude large monetary outlays to individual entities, limits for commodity program payments were initiated in 1970. Such limits have been continued, at various levels, since that date. The total amount which may be received by a single producer under one or more of the wheat, feed grain, and upland cotton programs is $40,000 for the 1978 crop and $45,000 for the 1979 crop. Payments under the rice program have been limited to $52,250 in 1978 and $50,000 in 1979. Rice has been made parallel with the other commodities, and the limit on total payments under one or more of the wheat, feed grain, upland cotton, and rice programs will be $50,000 in 1980 and 1981. This does not include loans or disaster payments. However, the payment limit has had little impact either on reducing total payments to the larger producers or on slowing the transition to fewer and larger farms. With the increased limits in the new law, this provision will likely conti ue to have little effect on either program operations or Government outlays.

Little if any immediate effect is foreseen for consumers due to program payment limits. Less than 1 percent of the wheat, feed grain, and cotton farms would be affected, and then

[9] The "farm problem" was, for years, characterized by overproduction and low prices. Production control (such as the current wheat set-aside) can be obtained through voluntary programs in return for payments of the type discussed here. Thus, the payments and subsequent payment limits were derived from efforts to maintain commercial agriculture rather than to redistribute income.

[10] Research studies have shown that *costs pe. .nit* of output fall as the number of units produced is increased. These "economies of size" encourage producers to expand in an effort to reduce per unit costs.

only to a minor degree. The basic thrust of the legislation is for Government programs not to encourage any radical change from the present family farm structure. In fact, the Secretary of Agriculture is to conduct a study on barring certain legal entities from receiving payments, and to report the findings to the Congress by January 1, 1979.

Grains

The 1977 debate on grain provisions was largely one of budgetary considerations. Policymakers found themselves in an uneasy situation—wanting to establish target prices and loan levels to at least match the national average cost of production estimates but at the same time to hold potential Government outlays to levels consistent with the overall objective of "balancing the budget." As is generally the case in the political arena, the debate was settled with a compromise between these two somewhat conflicting objectives. The grain support levels (as of January 1, 1978) for 1978 resulting from these deliberations are summarized in table 1.

Target prices—Corn and wheat target prices are to be altered in 1979-81 by adjusting the previous year's level by the change in a 2-year moving average adjusted cost of production.[11] The change in this 2-year moving average is for the preceding 3 years, taken 2 at a time. In mathematical notation, the change would be based on:

$$\frac{CP_{t-1} + CP_{t-2}}{2} - \frac{CP_{t-2} + CP_{t-3}}{2}$$

when: CP_t = adjusted cost of production in year t

Deficiency Payments—As has been noted, the direct payments made under the target price income support mechanism are referred to as deficiency payments. These payments are based

[11] Adjusted cost of production includes only variable costs, machinery ownership costs, and general farm overhead costs allocated to crops on the basis of the proportion of value of total production derived from that crop.

Table 1—Commodity target prices and loan levels for 1978[1]

Commodity	Unit	Target price	Loan level[2]
		Dollars per unit	
Wheat[3]	Bu	3.00/3.05	2.24
Corn	Bu	2.10	2.00
Sorghum[4]	Bu	2.28	1.90
Barley[4]	Bu	2.25	1.63
Oats[4]	Bu	---	1.03
Cotton[5]	Lb	.52	.44
Rice[6]	Cwt	8.45	6.34
Soybeans[7]	Bu	(none)	(discretionary)

[1] Several changes made since January 1, 1978 are *not* shown.
[2] Wheat, feed grain, and rice loan rates are preliminary.
[3] The target price is $3.00 if the crop is larger than 1.8 billion bushels; $3.05, otherwise.
[4] A target price is mandated for sorghum, but discretionary (with the Secretary) for barley and oats; all are to be on the basis of the same cost of production components as for corn (preliminary estimates are shown—the actual estimates have not been announced). The loan level for these feed grains is to be set in relation to corn (preliminary estimates are shown). The target prices shown for sorghum and barley are preliminary.
[5] The loan level is determined as the smallest of 85 percent of the preceding 4 marketing years' moving average spot market price for Strict Low Middling 1-1/16 inch upland cotton at average U.S. locations or 90 percent of the average adjusted price for the first 2 weeks of October of the five lowest priced growths of the growth quoted for Strict Middling 1-1/16 inch cotton, cargo insurance and freight paid (c.i.f.), Northern Europe—a projection is shown.
[6] The rice loan level is increased by the same percentage as the target price, except the Secretary has authority to reduce it as low as $6.31 per cwt if needed for competitive world trade. The 1977 target price is to be adjusted for changes in the cost of production by the same procedure as used for the other crops to establish the 1978 target price. The estimates shown are projections for both the target price and loan levels.
[7] The 1977 act mandates a price support loan for soybeans, but the level is discretionary with the Secretary.
---Dashes indicate not applicable.

on a calculation of program acreage times a program payment yield. The allocation factor for program acreage is to be determined by dividing the feed grain or wheat national program acreage (the amount estimated for domestic and export use, adjusted for desired carryover) by the national harvested acres for the crop. The allocation factor must be 80-100 percent of the acreage of wheat planted for harvest on the farm during the current year. Individual farm program acreage is determined by multiplying this allocation factor by the acreage of the crop planted for harvest. Deficiency payments are paid on the farm's program acreage multiplied by the program payment yield and the payment rate.

When a set-aside is in effect, eligibility for loans, purchases, and payments is contingent upon setting aside and devoting to conservation uses an acreage of cropland based on a specified percentage of the acreage planted to the crop in the current year.

Perhaps the most significant change is that deficiency payments, when made, will be paid on the basis of farm program acreage. This farm program acreage is the farm's share of acres planted for harvest, factored back (reduced) by the acreage needed to meet aggregate domestic and export use and to achieve desired changes in carryover levels.

Loans—The loan rates for corn shown in table 1 apply unless the average price of corn received by producers in any marketing year is not more than 105 percent of the loan level for that year. In that case, the loan level for the following year may be reduced to maintain domestic and export markets. The loan rate may neither be reduced more than 10 percent in any year nor set below $1.75 per bushel.

Loans for barley, oats, and rye are to be set according to their feeding value in relation to corn, and for sorghum in relation to feeding value and average transportation costs relative to corn.

Disaster Payments—Producers who are prevented from planting or whose crops are damaged by natural disasters, such as drought or flood, may receive payments based on farm program payment yields and a percentage of the established price in 1978 and 1979. This disaster payment system is a variation of the provisions in the Agriculture and Consumer Protection Act of 1973. No provisions are made for 1980-81.

Impacts—The loan rates for wheat established in the new act are not expected to have major impacts on retail food prices. Prices received by farmers for their 1977 wheat crop fell about 10% below the U.S. loan rate of $2.25 per bushel during early harvest, but averaged $2.31 for the 1977 crop. This does imply that income support payments are being made to wheat farmers to approach the $2.90 target price established for 1977 crop wheat.

An example ably illustrates the small impact of wheat price changes on final product price. The retail price of a 1-pound loaf of white bread was 35.5 cents in May 1977. Farm value of the wheat contained in this bread was about 2.5 cents, or 7 percent. Thus, a 50-cent rise in wheat per bushel would justify only a 3.5-percent increase in the cost of loaf of bread.

Feed prices were below the loan rate ($2.00 for corn) during the fall harvest period, with about a sixth of the crop placed under loan. This supports the price of the feed input to livestock. The ultimate effect would be price stabilizing rather than a justification for a price increase, however. This is because the large 1977 crop would have driven feed grain prices down further from 1973-76 levels without the program.

Sugar

Sugar prices have been erratic in recent years because of policy changes and variable production. Worldwide sugarcane and sugarbeet production has increased sharply since the 1974 shortage. Since consumption has been rising only slowly, prices have declined.

With domestic costs of production averaging above world market prices, a price support level of 52.5-65.0 percent of parity has been established in the new act to sustain a domestic sugar industry. This level has been estimated to allow efficient domestic producers to cover production costs. Since the support price is about 2-3 cents above 1977 raw sugar prices, wholesale and retail sugar prices are expected to increase. Import tariffs may be used when necessary for further protection of the domestic industry.

A related note to this action is that the future of high-fructose corn sweeteners as a competitor with sugar for the liquid sweetener market is directly related to sugar price. A relatively high guaranteed price to sugar producers may enhance the growth of the developing corn product industry. This is a vivid example of the interplay between and among commodity programs and of the complexity involved in setting farm product price supports when multiple objectives are involved.

Dairy

The price of milk is to be supported at not less than 80 percent of parity[12] from time of enactment through March 31, 1979. The support level is to be adjusted semiannually to reflect estimated changes in the parity index. After March 31, 1979, the milk support level will be set at 75-90 percent of parity, as required by permanent legislation.

An amendment to the dairy indemnity program authorizes payments for milk or cows producing milk contaminated by the presence of products of nuclear radiation or fallout or residues of toxic substances, if such contamination is not the fault of the farmer.

A regulation for the content of ice cream was required to be adopted by the Secretary within 30 days of enactment of the act. This provided that "ice cream" must contain at least 1.6 pounds of total solids to the gallon, weigh not less than 4.5 pounds per gallon, and contain not less than 20 percent milk solids, constituted of not less than 10 percent milkfat. It was also intended to assure consumers that the ice cream would contain no casein.

While this regulation was not expected to affect consumer prices to any great extent, it exemplifies the expanding role of Government into the consumer protection and food quality areas. Reputable processors would also benefit from this quality standardization, since their product would already meet the standard. They would be able to label their product "ice cream."

Peanuts

A two-price program for peanuts was established to extend through 1981. Quota peanuts within the farm poundage quota are to be supported at $420 per ton. "Additional" peanuts produced in excess of the farm poundage quota but not in excess of the acreage allotment will be supported at a lower rate determined by the Secretary.

The peanut program has been going through changes in recent years to bring production into closer alinement with actual market conditions. The new program was designed in an effort to achieve increased market orientation for this traditionally high-support crop.

Rice

An "established" target price is used to make the 1978-81 rice program similar to those for other grains. A minimum loan of $6.31 per hundredweight (cwt) provides a price floor. Other aspects of the program are similar to those for other grains, with the exception of the program payment limit. The limit is set at $52,250 for the 1978 crop and $50,000 for the 1979 crop. After 1979, rice will be under a common payment limit with wheat, feed grains, and upland cotton—$50,000 for each of the 1980 and 1981 crops. The 2-year transition period was granted for rice in view of the greater impact payment limits have on the predominantly large rice producers.

Grain Reserves

A producer-held storage program for wheat and, at the discretion of the Secretary, feed grains is created by the new act. This provision was the subject of much debate in the Congress. Disagreement arose over both the necessity and ownership of any such reserve. The final decision was for a farmer-owned reserve of 300-700 million bushels of wheat.

Consumers and livestock producers alike called for the establishment of such a reserve. One of the key reasons for the new legislation, cited by the Consumer Federation of America in 1976, was to provide for a domestic and international food reserve system to "protect both domestic and foreign consumers from emergency famines." The intent was that these reserves would be "stored in such a manner as to isolate them from the marketplace" (7).

The basis for the program is the current large carryover of these crops and an extended loan program in which producers are encouraged to maintain grain under loan for 3-5 years. Incen-

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[12] The "parity price" of a commodity is that price which gives it the same value (relative to cost of inputs) as in a specified base period, in this case 1910-14. For a more complete discussion of the parity concept and its relationship to the agricultural policy process, see Holland (*1*).

tives for storage include payments for storage cost, low interest rates, and loans for the construction of storage facilities. Furthermore, the Commodity Credit Corporation may not sell its stocks of wheat or feed grains at less than 150 percent of the price support for the commodity, when a reserve program is in effect.

The President is encouraged by the act to negotiate with other nations for development of an international system of food reserves for humanitarian food relief.

The Secretary is authorized to acquire grain as needed for relief in areas of distress caused by natural disaster, and he may also implement an emergency feed program to maintain livestock in natural disaster areas.

The general thrust, then, of the grain reserve provisions is:

a. to buffer sharp price movements which occur as production varies, and
b. to provide grain to relieve human food or livestock feed shortages as they occur worldwide.

This price stabilizing role of reserves is the key to their utility. The obstacles to be avoided are excessive stock accumulation and chronic price suppression. The availability of food and feed is not guaranteed by reserves, but an attempt is made to mitigate the market-inspired price increases which occur in situations when production is "short" relative to worldwide consumption.

Production Control

National wheat and feed grain production may be adjusted by the use of a "set-aside" program. A set-aside may be proclaimed if the Secretary of Agriculture determines that total supply of wheat or feed grains will be excessive. The inducement for voluntary producer participation is the requirement of compliance as a condition of eligibility for loans, purchases, and payments. As discussed in other sections, these support mechanisms may make important contributions to producer incomes.

To participate in the set-aside program, the producer must divert from production an acreage of cropland equal to a specified percentage of the acreage of that crop planted for harvest in the crop year for which the set-aside is in effect. Land diversion payments may be made as a further incentive to assist in adjusting total national acreage of these crops.

A 20-percent set-aside has been announced for the 1978 wheat crop, and a 10-percent corn set-aside is tentatively planned. These are expected to keep crop prices from dropping further and bring supply into better balance with demand.

DOMESTIC FOOD PROGRAMS

Food Stamp Program

The Food Stamp Program (FSP) is perhaps the most important public policy instrument operating today to influence the food intake and, thus, the nutritional status of the poor. The present legal authority for the FSP is the Food and Agriculture Act of 1977. As adopted, the legislation extends the program for 4 years—through 1981. The program, made a part of permanent legislation by the Food Stamp Act of 1964, is designed to provide low-income households the food-buying income necessary to purchase "more nutritious diets" through regular market channels.

While participation and, thus, program expenditures have increased substantially over the years, the FSP has not been adopted without substantial controversy. The issues which form the basis for the controversy continue to be debated as the provisions are negotiated each time the law is renewed. Although there continues to be a philosophical debate over the categorical nature of such aid (that is, coupons rather than cash), most of the issues surrounding the legislation relate to the institutional rules which are used to administer the provisions of the act. A list of questions typically asked would include:

1. How should program eligibility be determined (that is, who are the "poor households")?
2. Should public aid recipients be required to work in return for such aid?
3. How much does a nutritionally adequate diet cost, and who should be permitted to

establish such norms?
4. Should coupons be used to purchase other than "nutritious" foods?
5. Should the "ability-to-pay" principle be applied to food coupon insurance?

The major legislative reforms in the 1977 act can be related to each of these issue-oriented questions.

Eligibility

Eligibility for program participation is more clearly defined in the 1977 act than had previously been the case. While income continues to be the most basic eligibility criterion, the primary intent of the new legislation is to tighten program administration, reduce fraud and abuse, and eliminate the "nonneedy" from the program. Participation is limited to those households with a "net food stamp income" at or below the poverty line. The following deductions from gross income are allowed:

1. Standard deduction of $60 per month for each household in the contiguous States. Adjustments made semiannually beginning in July 1978 to reflect changes in the Consumer Price Index (CPI).
2. A deduction equal to 20 percent of all earned income to compensate for taxes, other mandatory deductions from salary, and work expenses.
3. Shelter costs in excess of 50 percent of income after other deductions were subtracted, not to exceed $75 per month.
4. Dependent care not to exceed $75 a month.
5. Combined shelter/dependent care deductions not to exceed $75 per month.

In addition, an eligibility constraint on total wealth makes households ineligible if financial resources exceed $1,750. Households with two or more persons, with one member 60 years or older, have an asset limitation of $3,000. Household resources are now defined to include boats, snowmobiles, airplanes used for recreational purposes, and any licensed vehicle to the extent that its fair market value exceeds $4,500.

The eligibility application procedure is simplified by the new law. Aid to Families with Dependent Children (AFDC) families need only a single interview to determine eligibility. Supplemental Security Income (SSI) households may not apply for stamps at Social Security offices. Public assistance and general assistance application forms must now include the information necessary to determine food stamp eligibility. Under the previous law, families in which all members received public assistance, general assistance, or SSI benefits were automatically eligible for food stamps.

The new legislation continues to allow program participation by those participating in labor strikes. Those opposed to retaining the provision argued that strikers are not "involuntarily" poor. Those in favor argued that since strike votes are secret ballots, those who vote against a strike but lose should not be penalized. An amendment to remove strikers from eligibility lost in the House of Representatives by a vote of 170-249. The new legislation does require needy students, if not tax dependents, to work at least 20 hours per week or register for such work.

Work Requirements

The work-no work question is also related to the broader question of eligibility. Philosophically, the question is clear: should recipients of public aid be required to work as a condition of eligibility? The work requirement in the new law excludes households from eligibility if they include a physically and mentally fit person between the ages of 18 and 60 who refuses to register, search for, and then take acceptable work. Further, heads of households who quit a job without good cause may not be certified as eligible.

In a related matter, a provision allowing the Secretary of Agriculture to establish 14 pilot projects to test a more strict work requirement was adopted. The tests will require food stamp registrants who do not find jobs in the private sector within 30 days to accept public service jobs at the minimum wage rate. Payment for such work will be made in the form of food stamps. Several members of the Congress supported a proposal with stronger wording that would have required the Secretary to establish such "work fare" projects in any community wanting them. That proposal would have required recipients to work in public service jobs for a specified number of hours each month equal to the value of their food stamp allotment. Those opposed to the measure argued primarily for equity (that is, the equal treatment of all public assistance recipients).

Level of Aid

The cost of the U.S. Department of Agriculture's (USDA) "Thrifty Food Plan" (TFP) is continued as the standard basis for determining coupon allotments. The TFP has been developed to help answer questions regarding the likely costs of a "nutritionally adequate diet." Adoption of the "Thrifty Food Plan" in the 1977 legislation reinforces the position taken by most that the FSP is intended to be (a) primarily a *food aid* program and (b) a minimum supplement. To reinforce the latter point, a proposal to hold program costs close to the 1977 levels was adopted. Expenditure ceilings of $5.85 billion in fiscal 1978, $6.16 billion in fiscal 1979, $6.19 billion in fiscal 1980, and $6.24 billion in fiscal 1981 were adopted.

Food Stamp Use

The one issue which strikes most directly at the heart of the philosophical debates regarding the operations of a FSP is defining how coupons may be used. Some have argued that public assistance programs should not dictate to the poor in this country what they may or may not purchase. Others have argued that the FSP should insist that the people in the program purchase nutritious foods. Currently, there appears to be relatively more political support for the former view.

First, in perhaps the most revolutionary reform action of the 1977 law, the purchase requirement as a condition for participation was eliminated. That is, it will no longer be necessary for any participant to commit a portion of earned income in order to receive bonus stamps.[13] Those who qualify for the program will simply receive the bonus stamp value of their coupons. Participants will thus be able to spend earned income in any way they choose.

Perhaps as important, this provision also removes the potential for vendor fraud in the handling of cash and greatly simplifies program operations. It will likely impact on participation, as well. Secondly, all amendments offered to restrict the use of coupons to "nutritional foods" were defeated.

Food coupons may, therefore, be used to purchase all food products for human consumption except alcoholic beverages, tobacco, hot food, or hot food products ready to be eaten immediately. Seeds and plants for use in home gardening to produce food are also allowed by the new law. Exceptions to the above are:

1. Persons aged 60 or over, the physically or mentally handicapped, Supplemental Security Income (SSI) recipients and their spouses are permitted to buy meals served and prepared in senior citizens' centers, residences for the elderly, nonprofit organizations and qualified private agencies offering meals at concessional prices, or for home-delivered "meals on wheels."
2. Stamps may be used to purchase meals prepared and served by drug addiction or alcoholic treatment centers.
3. Certain types of hunting and fishing equipment (excluding clothing, shelter, transportation equipments, firearms, and explosives) may be purchased with coupons by recipients living in remote areas of Alaska.

Related to the question of food stamp use is the question of whether a system of simple cash grants would not be more efficient and more equitable. In a test of the strength of that philosophical position, the legislators defeated a proposal to require the Secretary of Agriculture to authorize the payment of cash instead of stamps to households in which every member was either elderly, blind, or disabled, if requested by a State. Instead, a statement authorizing a study of such a proposal was agreed to.

Implications

The newly adopted provisions of the Food Stamp Act of 1977 represent the first major program revisions since 1973. The likely implications of these changes for taxpayers and participants are as follows:

Program Participation—A major objective of the new legislation was to make it easier for eligible nonparticipant households to receive food aid. To help accomplish this objective, the purchase requirement was eliminated and the

[13] Previous to the enactment of the 1977 law, all food stamp participant households of a specified size were eligible to receive the *same* allotment of food coupons. Based upon income, each household paid a variable amount for those coupons. The difference between the total value of coupons received and the value of the cash payment is called "bonus."

process for determining eligibility was simplified. Estimates are that these provisions may bring as many as 2.3 million eligible participants into the program. At the same time, the tightened eligibility requirements and more stringent constraints on assets are expected to make ineligible about 1.3 million participants with incomes above the poverty line.

Just *which* eligible nonparticipants will be encouraged to participate as a result of the elimination of the purchase requirement is still unclear. Proponents of eliminating the purchase requirement (EPR) have argued that, under rules requiring purchase for stamps, participation is cost prohibitive for many of the poorest households. Others have argued that, since the purchase requirement has been on a sliding scale and four-person households with less than $30 a month net income have already been eligible to participate *without* a purchase requirement, EPR may encourage participation by those eligible for relatively few dollars worth of bonus coupons. At this point in time, the result is unknown. Clearly, if participation among the lowest income groups has been constrained by the existence of a purchase requirement, EPR could have a rather significant positive impact on total food purchases by the poor and on program costs.

Diets of the Poor—The 1977 Food Stamp legislation is expected to impact on nutritional intake in two ways. First, since total program participation is expected to increase, there will likely be increases in food purchasing by some poor families. The distribution of bonus stamps to more eligible households will likely mean that those households not previously participating will increase their expenditures on food for home consumption. The extent of the expected increase is, however, unclear at this point.

On the other hand, EPR will almost certainly reduce the food purchasing effectiveness of the bonus transfer. Other things being equal, the amount of cash income available for the purchase of products other than food will increase relative to present provisions *for those who have been participating in the FSP*. Thus, some households who have been participating in the program will likely, as a result of EPR, reduce their purchases of food for home consumption. Figure 3 may be

EXPENDITURE PATTERNS UNDER ALTERNATIVE FOOD STAMP PROGRAMS

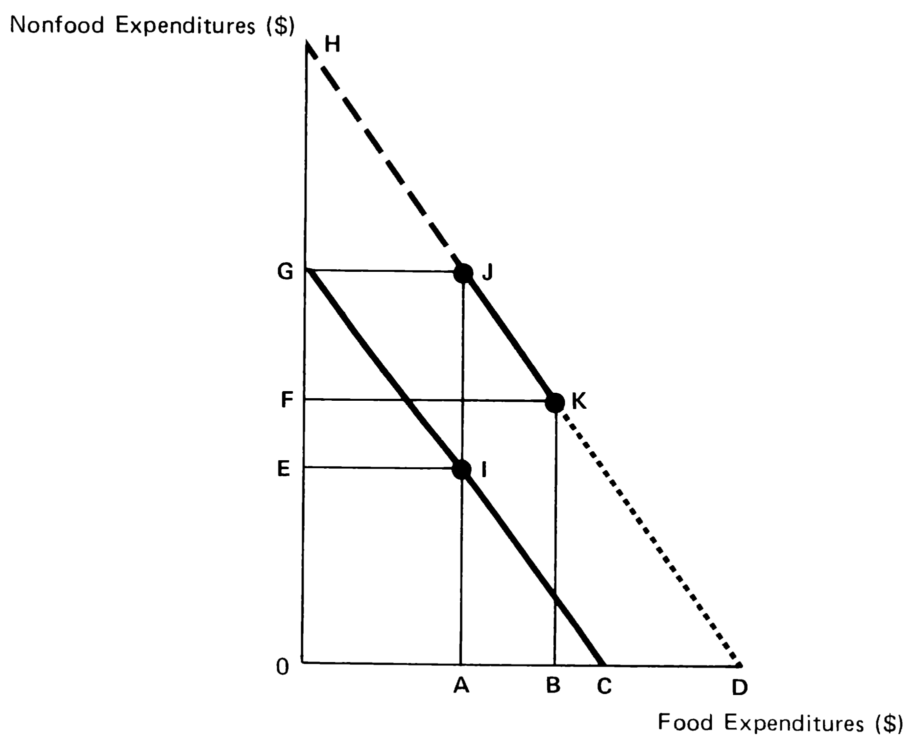

Figure 3

used to help explain why these results are expected.

Let us suppose that consumers could spend income on either "food" or "nonfood." A specific household income, in the absence of any Government aid, could be used to purchase OG dollars worth of "nonfood," OC dollars worth of food, or combinations of "nonfood" and "food" expenditures represented by the points on line GC. For example, a household expenditure at point I would mean that OE dollars were being spent on "nonfood" with OA dollars spent on "food." In this case, roughly half the total income is being voluntarily allocated to food purchases.

Participation in the pre-EPR FSP would have required this household to give up GF dollars in order to obtain food coupons worth OB dollars. If this household used only coupons to make food purchases, the expenditure allocation would be at point K. In that case, OB dollars would be spent for "food" and OF dollars would be spent for "nonfood." Food expenditures increase quite dramatically in this case, but *nonfood expenditures also increase.* The household used some of the money it previously allocated to food (EF dollars) to increase its purchases of nonfood items. Therefore, although all coupons must be spent for food, the FSP is less than 100 percent effective in increasing food spending. The typical assumption, based upon observed behavior, is that about 50-55 percent of all bonus FSP dollars have resulted in increased food purchases.

The effect of EPR can also be observed by studying figure 3. By eliminating the purchase requirement the household is no longer required to give up any income in order to obtain food coupons. However, only the bonus stamps are distributed. With EPR, the household represented by figure 3 would receive OA dollars worth of food coupons.[14] In this case, the household could choose to continue spending OA on food (the value of the bonus stamps received) and release EG of the dollars *previously spent on food* for use in buying nonfood items. Of course, any combination along line segment JD is possible. It is clear, however, that EPR releases more income to buy nonfood items than did the pre-EPR FSP. Clearly, a household's *desire* to spend money on food rather than on nonfood items is more important with EPR than with the pre-EPR program.

Thus, choices are widened for those households who participated in the pre-EPR Food Stamp Program. Previously, participating households were committed to spend at least OB dollars on food. With EPR, *program rules* only commit them to spend OA dollars on food.

A simple cash transfer of the bonus stamp value would allow such households even more freedom to spend. Theoretically, the household would not be required to spend any income on food and all points along line segment HD would be possible. Realistically, one would not expect expenditure patterns for most households to be drastically different under a simple cash transfer equal to the bonus value from those observed under EPR.

There are several aspects about this analysis which figure 3 highlights:

1. The expected differences in purchasing for any single household as a result of EPR are closely related to the proportion of its pre-EPR total stamps that were bonus stamps. The higher the proportion of pre-EPR FSP total stamps that were bonus stamps, the less likely are dramatic changes in overall purchase patterns. In figure 3, the shorter the length of JK, the less likely is a change in the purchase pattern. Therefore, as a result of EPR, one should expect to see only minor changes in food purchasing by those households who previously had relatively low purchase requirements (for example, the closer together J and K are, the smaller the change in food purchase patterns under EPR). Conversely, those with relatively high purchase requirements could be expected to reduce their food purchases relatively more as a result of EPR.
2. Simply because households will have more freedom in allocating their income with EPR than with pre-EPR, it does not mean that participating households *will* choose to buy less food, only that they have additional freedom to purchase less. They have always had the freedom to purchase more food than the value of total stamps issued. Participating households

[14] Bonus stamps will be issued to eligible households sufficient to make up the difference between the total cost of the Thrifty Food Plan for that household size and 30 percent of its net food stamp income.

who have been spending more than OB for food will likely be unaffected by either EPR or a complete "cash out."

3. Little is known about the relationship between expenditures on food and the *nutritional value* of the diet consumed. Without more information on the types of foods being purchased, the methods of food preparation being used, and eating habits in general, it is difficult to say anything meaningful about the implied consequences of EPR on the nutritional adequacy of participant diets.

Program Costs—Program costs are expected to increase as a result of the legislative changes made in 1977. Recent estimates from the Congressional Budget Office (CBO) indicate that the expected increase in participation (10 to 20 percent) will likely increase budget outlays between $600 million and $1.2 billion.

Estimates of participation rate changes *by benefit level* are crucial to the development of this estimate. Current overall participation averages about 50 percent of those technically eligible (*8*). The rates of participation by income class decrease from an estimated 67 percent for those households with less than $100 gross income per month to about 13 percent for those eligible households with incomes over $1,000 per month. As stated previously, the likely distributional impacts of the 1977 legislative changes are unclear. If the changes achieve their legislative objective, and participation rates of the "poorest of the poor" are increased, the potential budgetary expenditure could exceed the limits established in the law.

Child Nutrition Programs

The National School Lunch Act and the Child Nutrition Act outline the national child nutrition policy. The programs, operated under the two separate acts, have as their overall purpose "to safeguard the health and well-being of the nation's children." The programs all operate by assisting the States through grants-in-aid and other means, to provide an adequate supply of foods and facilities for the establishment, maintenance, operation, and expansion of nonprofit food programs for children. Present law authorizes several different but complementary child nutrition programs. They include:

(a) National School Lunch Program (NSLP)
(b) Summer Food Service Program (SFS)
(c) Special Milk Program (SMP)
(d) Child Care Food Program
(e) School Breakfast Program
(f) Special Supplemental Food Program for Women, Infants, and Children (WIC)
(g) Food Service Equipment Assistance Program

Two types of aid are authorized: (1) cash assistance and (2) commodity distribution. Cash assistance is provided primarily to support the feeding of "poor" or "near-poor" children in schools operating the NSLP. The cash assistance is provided mainly for the purchase of "local" food, reimbursement of some administrative expenses, and the purchase of equipment used in the preparation and serving of meals. Historical funding levels for all food programs operated within the 50 States and the District of Columbia are reported in table 2.

As indicated, $2.19 billion of the total $7.34 billion in food aid were distributed through the child nutrition programs in 1976—30 percent of the total. NSLP is by far the biggest—$1.5 billion. The SFS Program has grown very rapidly, however, and as of 1976 represented a major program expenditure.

As the total value of the aid distributed through these programs is increased, any administrative shortcomings become more obvious. The impact of these programs becomes more visible and this, in turn, increases the pressure for legislative reform.

The 1977 child nutrition legislation is reform legislation. Its sections are written to "amend the National School Lunch Act and the Child Nutrition Act of 1966 in order to revise and extend the Summer Food Service Program, to revise the Special Milk Program, to revise the School Breakfast Program, to authorize the Secretary (of Agriculture) to carry out a program of nutrition information and education as part of the food service programs for children conducted under such Act." In addition, provisions authorize a program to reduce paperwork in the States, to alter the food equipment assistance program, and to permit the Secretary of Agriculture to purchase agricultural commodities for donation to the child nutrition programs.

The policy issues which have surfaced since passage of the last National School Lunch and

Table 2—Federal cost of USDA food programs, 50 States and District of Columbia, 1970-77

Program	1970	1971	1972	1973	1974	1975	1976	1977
	Million dollars							
Food stamps								
Total face value issued	1,925	3,103	3,615	4,049	5,868	7,680	7,818	7,425
Bonus stamps[1]	1,104	1,699	1,980	2,209	3,498	4,602	4,657	4,373
Food distribution[2]								
Needy families	275	261	225	152	87	11	8	11
Schools[3]	234	311	275	253	355	364	448	528
Other[4]	34	37	39	48	36	33	33	49
Child nutrition[5]								
School lunch	337	628	785	939	1,137	1,340	1,505	1,645
School breakfast	14	22	28	43	67	94	118	147
Special food[6]	15	34	43	52	87	116	240	236
Special milk	96	92	91	63	90	134	147	152
WIC[7]	---	---	---	---	33	106	182	281
Total aid[8]	2,109	3,084	3,466	3,784	5,390	6,800	7,337	7,422

[1] Includes Food Certificate Program.
[2] Cost of food delivered to State distribution centers.
[3] Includes Special Food Services.
[4] Includes supplemental food, institutions, elderly persons.
[5] Money donated for local purchase of food. Excludes nonfood assistance.
[6] Includes child care and Summer Food Programs.
[7] Special Supplemental Food Program for Women, Infants, and Children, begun January 1974.
[8] Includes bonus stamps, food distribution, child nutrition, and WIC. Columns may not add up due to rounding.
---Dashes indicate program not in operation.

Child Nutrition Act amendments relate almost totally to "operations" rather than programs, per se. A major concern was the operation of the SFS Program. This program, authorized by legislation in 1968, had grown to an average daily participation of more than 3.7 million. Program costs had reached the $200 million mark.

Major program expansion was, however, localized. In 1976, the number of SFS participants in the city of New York exceeded the number of children in that State receiving free and reduced-price lunches by 146 percent. There were reports of food waste, program mismanagement, and vendor and sponsor fraud from persons familiar with the program as it operated in that city.

While such problems were apparently not indicative of program performance across the Nation, those reports served to damage the program's integrity. The Congress was determined, with the new legislation, to reduce the potential for fraud to restore the program's credibility.

Commodity distribution for use in the NSLP has also evolved as an issue. Some school administrators, concerned about menu disruptions caused by "commodity surges" (the delivery of unusually large quantities of specific commodities at a point in time), argued that such delivery procedures contribute to food waste and budget inefficiencies. On the other hand, there is apparently a wide recognition that the commodity purchase program does allow some schools to offer higher quality and sometimes more nutritious meals than would be the case if they were offered cash only.

The new legislation is designed to improve the delivery of donated commodities. It is hoped this can be accomplished by additions to the legislation which require that the Secretary of Agriculture establish procedures which will:

- Ensure that the views of local schools regarding the type of commodity assistance needed are reflected in State reports to the Secretary and that the Secretary will consider such views in the purchase and distribution of commodities,
- Encourage States to submit views regarding acceptability of commodities,
- Ensure that deliveries of commodities are consistent with school calendars and occur with sufficient advance notice,
- Provide for systematic review of local costs and benefits of the commodity distribution, and
- Make available financial assistance on the use of commodities.

In addition, the Secretary is authorized to conduct major studies which will investigate the impact of commodity distribution on administration and nutritional impact, meal costs, food quality, plate waste, and farm income.

Two other issues which relate to the operation of the NSLP are resolved by the new legislation. Both are reflections of the growing concern for improved child nutrition generally. The first relates to the availability of competitive nonnutritious foods at times when federally funded food service programs are being operated.

The Secretary of Agriculture is given the authority by the legislation to approve which competitive foods may be offered for sale when federally supported meals are being served. Only those foods which "make a positive nutritional contribution in terms of their overall impact on children's diets and dietary habits" will be allowed. The second concerns the larger issue of providing nutrition education in schools.

The 1977 legislation takes a bold step in development of a national nutrition and training program to accompany the child nutrition programs. A new section is added to the Child Nutrition Act of 1966. This section establishes a system of grants to State educational agencies. Its purpose is to develop a program "to encourage effective dissemination of scientifically valid information to children participating or eligible to participate in the school lunch and related programs." The NSLP and other child nutrition programs are to be fully used "as a learning laboratory." The adoption of this provision will impact directly on each household where the children are exposed to the child nutrition programs. Whether its ultimate impact will be to improve dietary habits remains unknown at this point.

Finally, the legislators approved changes authorizing the provision of funds to States for food service equipment. Priority for disbursement of such funds is now given to schools without facilities to prepare, cook, and serve hot meals. This issue is not new. When the equipment assistance program was made part of the permanent legislation in 1970, the apportionment formula was changed so that 50 percent of the funds were apportioned based on the general assistance portion of the lunch program. The remaining 50 percent was apportioned on the basis of the ratio of children enrolled in each State in schools without a food service program to the number of students enrolled in schools in all States without food service. Since that time, the rules have been periodically adjusted to provide additional funds for schools without food service facilities.

AGRICULTURAL AND HUMAN NUTRITION RESEARCH

Goals

Research, extension, and teaching provisions are perennially underrated in the agricultural acts as to their importance in food policy, especially for consumers. Over the years, these three activities have made important contributions to increased agricultural productivity. As such, these provisions have been vital to the Nation's well-being (*8*). Production methods derived from research have enabled U.S. farmers to increase production dramatically. Output per man-hour on farms is over 3 times higher than 20 years ago, compared with an increase per worker of only 1.7 times in manufacturing industries.

Utilization of knowledge gained from agricultural research enables agricultural production to expand. When production expands at a faster rate than demand, a downward pressure is exerted on real agricultural prices (fig. 4). Supply (S) is shown increasing at a more rapid rate than demand (D) over time (subscripts 1, 2, and

POTENTIAL IMPACT OF RESEARCH ON CONSUMER PRICES

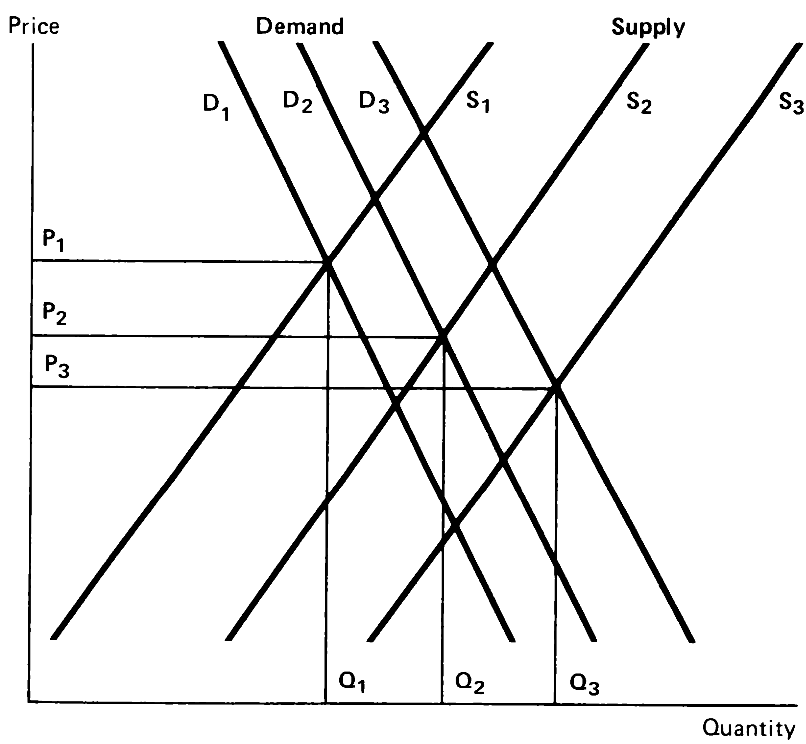

Figure 4

3). The resulting price decline is of direct benefit to consumers.[15]

In recent years, agricultural research, extension, and teaching costs have risen at a faster rate than appropriations. Increases in the level of Federal support for the food and agricultural sciences were therefore needed just to keep pace. The method for increasing this support in the 1977 act is summarized below.

The stated purposes of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 include:

1. Establishing USDA as the lead agency for the food and agricultural sciences, and emphasizing that research, extension, and teaching are distinct missions of USDA;
2. Improving coordination and planning of research and assuring that results are effectively dispersed to users; and
3. Establishing a new system of competitive grants for research, facilities, and researchers.

A need is recognized for new Federal initiatives in finding alternatives to technologies based on fossil fuels, and in doing research on human nutrition and on environmental problems caused by technological change.

USDA is designated as the lead agency of the Federal Government for human nutrition research (except the biomedical aspects), and the Secretary of Agriculture is to establish jointly with the Secretary of Health, Education, and Welfare procedures for coordination with respect to nutrition research in areas of mutual interest.

Advisory Committees

Subcommittee on Food and Renewable Resources

The National Sciences and Technology Policy, Organization, and Priorities Act of 1976 is amended to include a Subcommittee on Food and Renewable Resources. The purpose of this Subcommittee is to review Federal research and development programs relevant to domestic and world food and fiber production and distribution, to promote planning and coordination of this research in the Federal Government, and to recommend policies and other measures concerning food and agricultural sciences for the consideration of the Council.

Joint Council on Food and Agricultural Sciences

A Joint Council on Food and Agricultural Sciences is to be established by the Secretary of Agriculture, composed of representatives from USDA; Office of Science and Technology Policy; land-grant colleges and universities; State agricultural experiment stations; State cooperative extension services; and those colleges and universities, other public and private institutions, producers, and representatives of the public who are interested in and have a potential to contribute (as determined by the Secretary) to formulation of national policy in the food and agricultural sciences. The Assistant Secretary of Agriculture responsible for research, extension, and teaching is to be chairman.

National Agricultural Research, Extension, and Teaching Policy Advisory Board

This board has general responsibilities for preparing independent advisory opinions, initiating recommendations on, preparing reports on, and monitoring of the activities set forth in this act and other acts dealing with agricultural research, extension, or teaching activities, including reviewing recommendations of existing advisory committees. The Board is chaired by the Assistant Secretary of Agriculture for research, extension, and teaching.

Program of Competitive Grants for Agricultural Research

The Secretary shall establish a program for competitive grants for agricultural research. One of the specified categories is established to provide grants for conducting basic and applied research in the field of human nutrition. The other category provides research funds for additional research in the plant sciences.

A total of $5 million of the competitive grants money has been appropriated for human nutrition research. The program is designed to build basic knowledge needed for major breakthroughs in the area of human nutrition. Five areas are of initial concern:

[15] Benefits also accrue to early adopters of new technology in the production sector. In a perfectly competitive industry such as agriculture, prices fall to average cost in the long run.

- Human requirements for nutrients necessary for optimum growth and well-being;
- Nutrient composition of foods and the effects of agricultural practices, handling, food processing, and cooking on the nutrients they contain;
- Surveillance of nutritional benefits in evaluation of the USDA food programs;
- Factors affecting food preferences and food habits; and
- Techniques and equipment to guide consumers in the selection of food for nutritionally adequate diets in the home or in institutions.

Qualified scientists in the Federal Government, colleges and universities (both public and private), State agricultural experiment stations, and private organizations or corporations will be encouraged to submit proposals for support. The proposals will be evaluated by peer panels. It is hoped that these projects will make significant contributions to our understanding of human nutrition.

Also, under the Rural Development Act of 1972, the cooperative extension services are to give increasing attention to educational programs for human nutrition, including food utilization for all segments of society.

CONCLUSIONS

The year 1977 was crucial in translating America's food policy goals into legislation and programs. The Food and Agriculture Act of 1977 establishes the basic operating rules for the farm commodity programs, agriculture-related research, and the largest domestic food aid program—the Food Stamp Program. Other food programs were also revised in the National School Lunch and Child Nutrition Amendments of 1977. Program changes required by the 1977 act were most often incremental; that is, modification of existing programs rather than implementation of totally new concepts.

There are, of course, exceptions to this, but the major programs are left intact with only changes in their provisions. For example, the commodity support rates are changed, but the overall system of supports already in effect is retained. Similarly, provisions in the Food Stamp Program are changed (most notably the elimination of the purchase requirement), but the program framework remains the same.

The impact on consumers, consequently, is also incremental. Although the levels of aid to producers and consumers are changed somewhat by the act, the target groups and the tools for distributing aid remain basically the same.

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