

1977 FARM LEGISLATION AN ANALYSIS OF CONGRESSIONAL AND ADMINISTRATION PROPOSALS

Staff Working Paper

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1977 FARM LEGISLATION: AN ANALYSIS OF
CONGRESSIONAL AND ADMINISTRATION PROPOSALS

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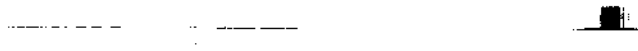
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PREFACE

This analysis of 1977 farm legislation was undertaken at the request of the House Budget Committee. The purpose is to provide the Congress with a comparison of the various farm bill options currently under consideration. This analysis deals only with the farm income and price support provisions. In keeping with CBO's mandate to provide nonpartisan analysis, no recommendations are made.

This analysis was conducted under the general supervision of Ray Scheppach, Assistant Director of the Natural Resources and Commerce Division. Principal authors are Jim Vertrees and Alan Walter (Natural Resources and Commerce Division), George Iden (Fiscal Analysis Division), and Marilyn Moore (Budget Analysis Division). Ron Meekhof provided useful data on farm financial conditions and outlook. Cheryl Miller, Connie Leonard, Barbara Bishop, Deborah Vogt, and Dorothy Kornegay typed the paper. Editorial assistance was provided by Patricia H. Johnston. Comments were received from Leo Mayer, Jim Culver, Barry Carr, J.B. Penn, Milton Ericksen, Allen Grommet, Dan Twomey, and Dale Stansbury.

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SUMMARY

The current options for major farm legislation in 1977--S.275, H.R.7171, and the Administration proposal--are evolutionary adjustments of the 1973 Agriculture and Consumer Protection Act. The impacts of these options 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.

Compared with continuation of current policy (extension of the 1973 Act) all three options would increase projected income transfers to the farm sector and raise the level of income protection for grain and cotton producers. Under CBO's base projections, over 1978-1981, S.275 would add an annual average of \$1.9 billion to farm income; H.R. 7171, \$1.0 billion; and the Administration proposal \$0.3 billion. Nearly all federal payments would be distributed among the predominately family-owned and operated farms with sales over \$20,000, which account for about a third of U.S. farms and ninety percent of total farm output. In particular, those farms with sales over \$100,000 (4 percent of all farms) would receive about one-half the payments. The other two-thirds of all farms, which are highly dependent on nonfarm earned income, would receive only marginal benefits from federal farm programs. Payment limitations and other provisions notwithstanding, none of the options would be likely to alter the trend toward fewer and larger farms.

Improvements in the level and stability of farm income will likely lead to expanded purchases of farm machinery and other inputs and of family living items. Additional farm income under the options will tend to reinforce recent increases in farm land prices and perhaps intensify the expected rate of land price increases under current policy. To the degree that payments are based on target prices indexed to production costs including land, as under S.275, such benefits will be partly capitalized into land prices. Increased land prices in turn lead to higher target prices and budget costs. Thus, there is the potential for a cycle of increased land prices (and production costs), higher target prices and greater income transfers (budget outlays). Furthermore, higher land costs increase production costs for renters and raise entry costs into farming. By

linking payments closely to actual production, under certain conditions target prices can be a key determinant of production. This may lead to increased production (and budget costs) of those commodities covered by target prices and to a decline in production of other commodities that compete for acreage.

All the options would increase projected direct payments compared to continuation of current policy, with S.275 costing \$10.8 billion more than current policy over fiscal years 1978-1982; H.R.7171 would cost \$5.8 billion more; and the Administration's proposal would cost \$1.1 billion more. Though under the options federal outlays in support of farm commodity programs would increase, the share of the federal budget for direct payments under commodity programs would be unlikely to reach the level of 1966-70 of 1.5 percent. The use of production controls (which seem likely for the 1978 wheat crop) under certain conditions could reduce commodity program outlays but at the risk of higher and more unstable farm and food prices which could cause increases in federal outlays for other programs such as food stamps.

The options are not expected to have a major impact on retail food prices or on the general economy. The loan rates embodied in H.R.7171 and in the Administration proposal are not above base projections of market prices, although the loan rates in S.275 imply slightly higher retail food prices in 1979-1981. The linking of loan rates under S.275 to target prices (indexed to cost of production) could cause U.S. export prices to be less competitive, thus requiring federal subsidies. The increased budget outlays implied in S.275 and H.R.7171, compared with current policy or with the Administration proposal, would not be large enough by themselves to have much impact on output and prices in the economy.

There is considerable uncertainty over whether or not the consumer and the U.S. economy would continue to be exposed to inflationary shocks from the farm-food sector. Each of the options contains provisions for encouraging the accumulation of stocks, and each contains provisions for the control of production if budget costs become unacceptable high. The degree to which the U.S. economy would be exposed to inflationary shocks from the farm-food sector would depend in part on how the Administration chooses to reach a balance among food, budget, and agriculture policy objectives.

CHAPTER I. INTRODUCTION

Congress is now writing a new omnibus farm bill. The Senate has passed S. 275 and the House Agriculture Committee has reported H.R. 7171 to the full House. The Administration has also made recommendations for consideration by the Congress. There are many similarities among these options, but also some important differences.

The purpose of this paper is to analyze the expected impacts of key provisions of these options in order to facilitate the debate. An attempt is made to project impacts of the legislation proposals upon the farm sector, the federal budget, and the domestic economy. Unless otherwise noted, estimates of budget costs, impacts on farm income, and other results are derived from CBO's base projections of production, exports, domestic use, and market prices for major commodities. The base projections do not reflect the impacts of unusually good or bad weather in the United States or abroad on yields or exports in any given year. ^{1/} Nevertheless recognition is given to the uncertainty that will prevail in agriculture regardless of the legislation adopted. Emphasis is given to differences in the provisions that may substantially affect farmers, consumers, or the federal budget. The analysis is mainly limited to the wheat and feed grains programs.

KEY PROVISIONS

The three options are evolutionary adjustments of the Agriculture and Consumer Protection Act of 1973. Each builds upon the basic concepts embodied in the 1973 Act:

^{1/} Details underlying cost estimates can be found in committee reports for S.275 (95-180) and H.R.7171 (95-348).

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- o The target price 2/ concept whereby direct payments will be made to farmers if market prices fall below the target level is included in all three options, but the levels are different. Target prices apply to wheat, feed grains, cotton, and rice.
 - o Government loan rates which farmers can receive on commodities (used as collateral) are continued but also at different levels. Loan rates apply to wheat, feed grains, cotton, rice, soybeans, peanuts and tobacco.
 - o There is also general agreement that disaster protection from natural disasters for farmers should be retained.
 - o Each option makes participation in commodity programs voluntary without compelling inducements (such as strict marketing quotas) or mandatory controls to force participation.
 - o Each also vests considerable discretionary authority with the Secretary of Agriculture in administering the programs. This discretionary authority under all three proposals may be as important in determining impacts over the next several years as the differences between the bills.

S. 275 and H.R. 7171 make some adjustments in provisions applicable to 1977 crops. S. 275 covers the 1982 crop while H.R. 7171 and the Administration proposal extend only through the 1981 crops. A summary of key provisions is shown in Table 1.

Each option specifies the level of target prices for wheat and feed grains in 1978 and also specifies a formula for adjusting the levels in later years. H.R. 7171 and S. 275 also propose changes for the 1977 crop for wheat; the House bill also increases the 1977 feed grain targets. The Administration proposal does not recommend legislated changes in the 1977 crop.

2/ In some cases, different labels are applied to the same concept by the three proposals. For instance, target price, established price, and income support rates are equivalent terms.

TABLE 1. SELECTED PROVISIONS IN THE 1977 FARM BILLS

Item	Proposed By	Provision	
Target Prices	Wheat	Senate	\$2.90 per bushel in 1977, \$3.10 in 1978. Thereafter adjusted by change in cost of production including land (35 year average value) using last five years yield. Projected to equal \$3.24 in 1981.
		House	\$2.65 per bushel in 1977, \$3.00 in 1978. Thereafter adjusted by change in average cost of production (excluding land and management) for two previous years compared with two and three years previous. Projected to equal \$3.17 in 1981.
		Administration	\$2.90 in 1978. Thereafter adjusted by change in average cost of production for two and three years previously compared with three and four years previous. Projected to equal \$3.07 in 1981.
	Corn	Senate	\$1.70 per bushel in 1977 (unchanged), \$2.28 in 1978. Same adjustment as wheat. Projected to equal \$2.49 in 1981.
		House	\$1.85 per bushel in 1977, \$2.10 in 1978. Same adjustment as wheat. Projected to equal \$2.22 in 1981.
		Administration	\$2.00 in 1978. Same adjustment as wheat. Projected to equal \$2.08 in 1981.
Minimum Loan Rates	Wheat	Senate	\$2.25 per bushel in 1977, \$2.47 in 1978. Thereafter 85% of the target price. No deduction for storage permitted. A minimum of \$2.75 projected for 1981.
		House	\$2.25 per bushel in 1977, \$2.35 per bushel for 1978-81.
		Administration	\$2.25 per bushel for 1977-81. If prices fall within 105% of loan rate, the loan shall be reduced up to 5% for the following year.

(continued)

(Table 1 Continued)

Corn	Senate	\$2.00 per bushel for 1978. Thereafter 85% of the target price. Minimum projected to equal \$2.12 for 1981. No provision relating to storage charges.
	House	\$2.00 per bushel for 1978-81.
	Administration	\$2.00 per bushel for 1978-81. Downward adjustment similar to wheat allowed.
Allotments	Senate	For an individual the acreage planted for harvest times a ratio equal to the projected acres needed for domestic needs, exports, and stock adjustments divided by harvested acres, but not less than 90 percent or more than 100 percent of the acreage.
	House	Same as Senate, except not less than 80 percent of the acreage harvested.
	Administration	Same as Senate, except no minimum percentage of acreage harvested.
Supply Controls	Senate	Allow Secretary to mandate that a percentage of a farmer's previous year crop acreage be set-aside to conserving uses. Secretary may also limit acreage of a crop to a percentage of previous years acreage. Non-cooperators ineligible for loans, target price payments, or disaster payments. Secretary may pay producers for voluntary set-aside.
	House	Secretary may mandate set-aside based upon a percentage of the acreage grown in the previous or current year for those who wish to be eligible for program benefits. Secretary may limit the production of a crop to a percentage of the previous years production. Secretary may pay producers for voluntary set-aside.
	Administration	Same as House and may use a bid system for acreage reduction.

(continued)

(Table 1 continued)

Payment Limitation

Senate	Maximum of \$50,000 in direct payments for the wheat, feed grains, upland cotton, extra long staple cotton, and rice programs combined. Payments for disaster loss, resource adjustment, or public access for recreation as well as loan and purchases are not subject to the limitation.
House	Maximum of \$35,000 for 1978, \$38,500 for 1979, \$42,350 in 1979, \$46,585 in 1981 for the wheat, feed grains, and upland cotton programs combined. Rice maximum of \$52,250 in 1978, \$49,638 in 1979, \$47,156 in 1980, and \$46,585 in 1981. Disaster payments <u>are</u> subject to the limitation.
Administration	Same as Senate, except limit is \$27,000.

Grain Reserves

Senate	Mandatory extended loan program for wheat if it is in abundant supply. Loans shall be for three to five years. Producer receiving payment to cover storage costs. Interest charge shall equal the cost of money to the Treasury. Quantity shall equal 300-700 million bushels. Interest charge shall equal the cost of money to the Treasury. When market price equals 140% to 160% of loan rate the Secretary may induce producers to market wheat. Secretary may require repayment of loan plus interest when market price exceeds 200% of loan level. In addition the Secretary shall build an international food reserve of from 2 to 6 million tons of grain to use for humanitarian relief or to provide food if there is a shortfall in production overseas. Also the Secretary may accumulate a disaster reserve of 75 million bushels through CCC accumulations or direct purchases.
House	Requires the USDA to offer extended loans for wheat or feed grains of one year after the first 11 month period. The extended loan is without interest charge and the producer shall receive a storage payment of one cent per bushel per month. An extension for a second year shall be offered with the same terms; but if the market price exceeds 75% of parity, the extension is optional with the Secretary.
Administration	Recommends no restrictions or changes in the wide discretionary authority presently available, an extended resale program for rice and wheat has been implemented with their authority.

The target prices proposed for 1978 by the Senate (\$3.10 for wheat and \$2.28 for corn) are higher than the levels in the House bill (\$3.00 for wheat and \$2.00 for corn). The House target levels are somewhat higher than those proposed by the Administration (\$2.90 for wheat and \$2.00 for corn). The Senate also proposes higher loan rates than the House and the Administration. The House and Administration corn loan rates are equal while the House wheat loan rate is 10 cents per bushel above the Administration proposal. The Administration, but not the House or Senate, would allow a downward adjustment in supports when market prices approach the loan rate as a means to avoid reduced competitiveness in exports.

All three options modify the present allotment system which is based on historical acreages by basing payment acreage on current planted acreage. The only substantial difference is the amount by which the USDA could factor back the acreage on which a producer would receive payments. All three proposals provide about the same authority for supply controls. The options require that producers plant a particular crop in order to be eligible for its target price payments, a departure from the 1973 act for some crops.

The Senate proposes setting a limitation on direct payments (excluding disaster or resource adjustment payments) at \$50,000 per person for the major programs combined. The Administration proposes \$27,000. The House proposes to raise the limit for major programs (excluding rice) by 10 percent per year starting with \$35,000 in 1978. The rice limitation would be lowered by 5 percent per year until it equalled the limit for the major crops. Disaster payments would remain subject to the limitation.

The Senate and the House provide for action by the Secretary of Agriculture to implement a grain reserve. The House mandates an extended loan program for wheat and feed grains under which farmers would hold the grain. The Senate requires an extended loan program for wheat if supplies are ample and also mandates the establishment of an international food reserve for overseas use. Authority for establishing a domestic disaster reserve as soon as practicable is provided. The Administration does not propose changing the broad discretionary authority currently available under which it is operating a producer-held (reseal) reserve of wheat and rice.

The House also proposes to require that support rates be immediately raised to 100 percent of parity when the Administration suspends or causes to be suspended the export sales of major agricultural commodities.

ADMINISTRATIVE AUTHORITY IN RELATION TO EXPECTED RESULTS

Projection of the farm bill impacts on the farm sector over the next several years requires consideration of both the mandatory provisions in the legislation and the use of administrative discretionary authority. All the proposed legislation specifies certain provisions, such as the level of target prices and a mechanism for distributing payments among producers, allowing no discretionary authority to the Secretary. Many other provisions of commodity programs, including the level of loan rates, national allotment levels, reserves policy, export subsidies, PL-480 sales, and supply controls, may rest upon decisions made by the Secretary of Agriculture and other officials in the Administration.

Although the differences in the mandated portions of the three farm bills could have significant impacts upon the expected outcome over the next several years, farm income, commodity prices, and budgetary costs will also depend in large measure upon decisions made by the Administration. The decisions will undoubtedly depend upon which objectives the Administration chooses to emphasize and which are subject to trade-off. The actions of the Administration, regardless of the legislation, will depend upon domestic and world supply/demand conditions for agriculture, conditions in the domestic economy, and specific policy objectives to be pursued.

CHAPTER II. FARM SECTOR IMPACTS

Compared with continuation of current policy, the three options would increase the level of federal income transfers to the farm sector. Even if market prices are such that income transfers are lower than projected, all the options would increase the level of income protection for grain and cotton producers. Payments would be primarily distributed to the one third of all farms with sales over \$20,000 that comprise commercial agriculture. Payment limitations and other provisions notwithstanding, none of the options is expected to alter the trend toward fewer and larger farms. Additional farm income under the options would tend to reinforce recent increases in farm land prices and perhaps intensify the rate of land price increases that would otherwise exist. To the degree that government payments are based on target prices indexed to cost of production including land, such benefits would be partly capitalized into land prices. This in turn would lead to still higher target prices and budget costs. Thus, there is a potential for a cycle of increased land prices (and production costs), higher target prices and greater income transfers (budget outlays). The competitiveness of U.S. grain export prices could be directly influenced by loan rates. Under S.275, loan rates are escalated at the same rate as target prices which are linked to changes in production costs. This could cause U.S. export prices to be substantially higher than those of major competitors. By linking payments closely to actual production, all the options would make target prices under certain conditions a key determinant of production. This may lead to increased production (and budget costs) of those commodities covered by target prices and to a decline in production of other commodities that compete for acreage.

CURRENT SITUATION AND OUTLOOK

The record prices and incomes of recent years obscure a number of specific concerns about current and future agricultural policy:

- o The high income levels were obtained in large part through a dramatic surge in U.S. agricultural exports. Though export earnings provided badly needed foreign

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exchange, they have made U.S. agriculture substantially more reliant on grain exports as a source of farm earnings.

- o The income gains of recent years have not been uniformly distributed among all farmers. In particular, livestock farmers were severely hurt by rising feed costs and falling livestock prices (triggered by large-scale liquidation of beef and dairy herds). Also, income gains have been concentrated among the larger farms--those with gross sales in excess of \$100,000 per year.
- o Recent high grain prices (and incomes) have been reflected in a significant rise in farm real estate prices which have more than doubled since 1970. Though established landowners have experienced significant capital gains, increases in land prices have become a part of the costs of production for recent purchasers and renters of farm land. For some recent purchasers, their high purchase prices for land relative to declining grain prices present a financial burden. Other production costs have also increased.

Events of recent years notwithstanding, the fundamental position of U.S. agriculture has not changed much from the 1950s and 1960s. ^{1/} It continues to have the capacity to produce more than domestic and foreign markets will accommodate at acceptable prices, when worldwide growing conditions (weather) are favorable.

Conditions in the farm sector are reflected by these points:

- o Commodity prices have declined and farm income has stabilized below the high levels of 1973 and 1974. In real terms, farm income is now near 1970 levels while real nonfarm personal income is 24 percent higher.
- o Returns to equity in agricultural assets are at 1970 levels, which means they are below returns in nonagricultural sectors.

^{1/} See CBO Report, U.S. Food and Agricultural Policy in the World Economy, April 26, 1976.

- o The value of agricultural assets has increased substantially since 1970 largely due to rapid increases in land prices; but farm debt has doubled in the same period. Though the debt-to-asset ratio has improved in agriculture, it mainly reflects land price inflation and not a reduction in farm financial obligations.
- o The availability of credit is not a major problem in the farm sector. However, some producers, principally wheat and cattle producers, face liquidity problems as a result of drought, low prices, and increased costs. Improvement in cattle prices and feed costs are likely to bring some relief. For wheat producers, the availability of government loans and the prospects for deficiency payments in 1977 under current law provide some protection against further deterioration in financial conditions.

It is difficult to draw meaningful conclusions about the economic status of specific groups in the farm sector from aggregate data. Generally the large, family-owned farms that comprise commercial agriculture and that receive the greatest share of farm commodity program benefits are not now hard pressed financially, but some do face a cost-price squeeze. The prospect of no improvement in real farm income over the next two - three years will intensify their financial problems.

COST OF PRODUCTION PRICE SUPPORTS

All the options use cost of production to set and adjust target prices. S. 275 uses total production costs that include management and land (composite base, average acquisition value) in setting 1978 target prices and as an adjustor in later years. For 1979 and after, H.R. 7171 would adjust target prices by changes in average production costs which include variable, farm machinery, and overhead costs. The Administration proposal is similar. In addition, loan rates under S.275 are set at 85 percent of the target price, and therefore are also indexed to the cost of production. Land costs influence the change in target prices only under S. 275.

In Table 2, 1978 target prices are compared to 1977 U.S. average cost of production estimates. Target prices for wheat under all options exceed the nonland (variable, machinery-

TABLE 2. COST OF PRODUCTION AND TARGET PRICES: IN DOLLARS PER BUSHEL

	1977 Average Cost of Production a/			1978 Target Prices		
	Nonland b/	Total With Land At Avg.Value c/	Total With Land At Current Value d/	S.275	H.R.7171	Administration
Wheat	2.36	3.16	3.56	3.10	3.00	2.90
Corn	1.57	2.21	2.53	2.28	2.10	2.00

SOURCE: Costs of Producing Selected Crops in the United States - 1975, 1976 and Projections For 1977, Economic Research Service, United States Department of Agriculture, January 21, 1977.

a/ Midpoint of range for 1977.

b/ Variable, farm machinery, overhead, and management costs.

c/ Land cost estimates on a composite basis with land valued at average acquisition prices.

d/ Land cost estimated on a composite basis with land valued at current prices.

overhead, and management) production costs. In this respect, all cover some portion of land costs and S. 275 covers most of the land cost based on average acquisition value. Corn target prices exceed nonland costs, and under S. 275 the target price exceeds the average total cost of production including land. For 1979 and after, these same relationships would be maintained.

FARM INCOME

Based on CBO's base projections, all three options would improve farm income over 1978-81. ^{2/} Direct payments would contribute to farm income an annual average of \$2.8 billion over 1978-81 under S. 275; \$1.9 billion under H.R. 7171; and \$1.2 billion under the Administration's proposal. Compared to continuation of current policy (extension of 1973 Agriculture and Consumer Protection Act) over 1978-81, S. 275 would add to farm income an annual average of \$1.9 billion; H.R. 7171 \$1.0 billion; and the Administration proposal, \$0.3 billion (see Table 3). In addition, farm income in 1977 would be improved by \$0.8 billion and \$0.3 billion under S. 275 and H.R. 7171, respectively. Slightly higher wheat and feedgrain market prices under S. 275 (due to loan rates) would add an additional \$1.0 billion annually over 1979-81.

These farm income impacts are based on specific assumptions about the next several years. However, it is clear that S. 275 provides the highest level of income protection to grain farmers because of the higher level of target prices and loan rates. Both Congressional proposals provide more income protection and require greater budget outlays than the Administration proposal.

Distribution of Payments

In the farm sector, a small proportion of total farms account for the major share of farm output. In 1975 there were 2.8 million farms in the U.S.; however, 110,000 of these farms (about 4 percent) had sales over \$100,000 and accounted for nearly half of all farm output as measured by shares of cash receipts from farming. Farms with sales of \$40,000 to \$99,999

^{2/} See Committee reports on S. 275 and H.R. 7171 (95-180 and 95-348) for details and estimates.

TABLE 3. CHANGE FROM CURRENT POLICY IN CONTRIBUTION TO NET FARM INCOME FROM DIRECT PAYMENTS: IN BILLIONS OF DOLLARS, CALENDAR YEARS a/

	1977 <u>b/</u>	1978	1979	1980	1981	Total	Average 1978-81
S. 275	0.8	0.9	1.9	2.5	2.3	8.4	1.9
H.R. 7171	0.3	0.6	0.9	0.9	1.7	4.4	1.0
Administration	0.0	0.5	0.4	0.0	0.3	1.2	0.3

a/ Estimated direct payments (deficiency and disaster) under CBO's base projections by fiscal years converted to a calendar year basis.

b/ Reflects changes in wheat only by S. 275 and H.R. 7171 for the 1977 crop.

TABLE 4. DISTRIBUTION OF GOVERNMENT PAYMENTS

Calendar Year	Direct Government Payments (Billions of Dollars)	Farms With Sales Over \$20,000	
		Percent of All Farms	Percent of Payments
1965	2.5	13	38
1966	3.3	15	49
1967	3.1	15	50
1968	3.5	16	51
1969	3.8	18	55
1970	3.7	20	57
1971	3.1	21	58
1972	4.0	24	63
1973	2.6	35	74

SOURCE: Farm Income Statistics, Statistical Bulletin No. 547, Economic Research Service, United States Department of Agriculture, July 1975.

(12 percent) accounted for about a quarter of farm output, and those with sales of \$20,000 to \$39,999 (20 percent) for about a fifth. Farms with sales in excess of \$20,000 (36 percent) clearly constitute commercial agriculture. For the most part they are family owned and operated with varying degrees of hired labor. As a group commercial farms are highly dependent on farming for income, particularly as the size of their operations increases. For example in 1975, farms with sales over \$100,000 received 85 percent of their income from farming; those with sales of \$40,000-99,999, 75 percent; and those with sales of \$20,000-39,999, 65 percent. On the other hand, farms with sales less than \$20,000, particularly those with sales under \$10,000, are outside the mainstream of commercial agriculture and rely heavily on nonfarm employment.

From 1965 to 1973, the last year of large government payments, those farms with sales over \$20,000 increased their share of government payments from 38 to 74 percent (Table 4). During that period, such farms increased in absolute numbers and as a proportion of total farms. However, growth in recent years in the number of farms with sales over \$20,000 most likely represents the impact of higher farm prices on sales rather than actual growth in the size of farm operation. The concentration of payments among larger farms was mainly due to the determination of payments on the basis of the size of farm allotments derived from historical cropping patterns.

Though payments are based on current year's plantings under the options rather than historic allotments, this would likely increase the degree of payment concentration. Future direct payments distributed in rough proportion to cash receipts from farming imply: 3/

- o About half would go to farms with sales over \$100,000. In 1975 the average net income per farm in this category was \$75,700 and estimated real estate capital gains were \$81,700.

3/ The following farm income data are from Farm Income Statistics, Statistical Bulletin No. 557, Economic Research Service, United States Department of Agriculture, July 1976. The capital gains data are from Dr. Luther Tweeten, Oklahoma State University.

- o Nearly a quarter would go to farms with sales of \$40,000 to \$99,999. In 1975 the average net income per farm in this category was \$24,100 and estimated real estate capital gains were \$27,200.
- o About a fifth would go to farms with sales of \$20,000 to \$39,999. The farms in this category in 1975 had an average net income per farm of \$15,700 and real estate capital gains of \$17,600.
- o Those farms with sales under \$20,000, (about 64 percent of all farms) would receive only minor benefits from farm commodity programs.

The effectiveness of payment limitation provisions of the options on reducing the level or altering the distribution of benefits would be very limited. Few individuals have large enough farm operations to be affected directly, and in addition leasing arrangements (and other devices) limit the provisions' effectiveness. Based on available data, the payment limitation for wheat and feed grain producers would have to be lower than \$20,000 to have any significant effect on the level of payments.

FARM STRUCTURE

As noted, slightly over a third of U.S. farms account for nearly 90 percent of farm output. The other two-thirds make a minor contribution to total output, and for the most part the operators are heavily reliant on nonfarm income.

Family-owned and operated farms still account for the large majority of all farms. For years, however, the trend has been toward fewer and larger farms. While many factors have contributed to this trend, the relative stability and reduced uncertainty fostered by government commodity program were instrumental in facilitating the expansion of farm size in the 1950s and 1960s. The distribution of government program benefits in proportion to production favored larger farms which also contributed to the trend.

The potential income transfer under these options and the degree of income protection they are expected to provide will likely provide further incentive for increased size and concen-

tration. At a minimum, payment limitations and other provisions notwithstanding, the options are not expected to alter long-term structural trends.

PRICES OF FARM PRODUCTION INPUTS

Improvements in farm income tend to increase the demand for land and other inputs such as farm machinery. It is expected that farm land prices will continue to rise but not at the rates of recent years, unless farm prices and incomes again escalate sharply as in 1973 and 1974. Additional farm income from government payments under the options would tend to reinforce recent increases in land values and perhaps intensify the rate of land price increases that would otherwise exist. To the degree that such payments are based on target prices that are indexed to cost of production changes including land (as under S. 275), such benefits would be partly capitalized into land prices. This, in turn, would lead to still higher target prices. Increasing land prices mean capital gains for landowners, higher entry costs, and higher production costs for renters. Land price increases that escalate production costs may, over time, contribute to higher food prices and reduce the U.S. comparative advantage in export markets.

EXPORTS

Commodity loan rates can have a direct effect on domestic prices and the competitiveness of U.S. products in international markets. The Administration proposal would provide the Secretary of Agriculture substantial discretion in determining the loan rates for wheat and feed grains. H.R. 7171 would set minimum levels with upward adjustments at the discretion of the Secretary. Under S. 275, loan rates are 85 percent of the target prices which are indexed to cost of production including land.

Under CBO's base projections, market prices for corn would be sensitive to loan rates under all options, but particularly under S. 275 where the loan rate sets the market price. Wheat prices, though sensitive to loan levels under H.R. 7171 and the Administration proposal, would be directly determined by loan rates under S. 275. Though it is difficult to project the impact on grain exports of marginally higher prices under S. 275, the linking of loan rates to target prices could decrease U.S.

exports if they cause export prices to be higher than competitors. Export subsidies would be used to counter the effect of high (relative to U.S. competitors) export prices. Such subsidies require a federal outlay, however. Also, export subsidies run counter to the U.S. position in the General Agreement on Trade and Tariffs (GATT).

PRODUCTION

The options would make target price payments directly determined by current acreage harvested (acreage planted for harvest under S. 275) and program yields. Payments would be more closely tied to actual production than in the past when they were based on a fixed allotment. Traditionally, it has been thought that market prices or loan rates were major determinants of producers' production response. Under these options, target prices would become the minimum price a producer receives (from the market and the federal government) for a major share of production. Thus target prices under certain conditions would be a key determinant of production decisions.

If target prices among commodities are in economic balance (relative to profitability), the acreage planted to crops not covered by target prices might be affected. For example, production responses to wheat, feed grains, and cotton target prices could cause a decline in the acreage planted to soybeans and other crops that compete for acreage. In the case of soybeans (not covered by target prices), the level of loan rates (at the discretion of the Secretary) could temper effects. Since target prices are based on cost of production, however, under all the options, there would likely be periods of considerable economic imbalance among target prices. Weather (as it affects yields and unit costs) would be a primary cause. Therefore, there is a potential for target prices to cause some misallocation of resources among the farm sector.

Compared to projected wheat prices over the next 2-3 years, target prices under the options, particularly under S. 275, would provide incentives to increase wheat production a few million acres over what it would otherwise be. Corn target prices appear to have less potential impact relative to projected market prices. Compared to U.S. total average production costs (Table 2), target prices under S. 275 provide the greatest incentive for production response to target prices.

Compared to current policy the options would all increase direct payments with the Congressional proposals exceeding the cost of the Administration's. The critical difference between S. 275 and the other options is a higher level of feed grain payments. The use of acreage set-aside under certain conditions could reduce budget costs of agricultural and price supports but at the risk of higher and more unstable farm and food prices and greater federal outlays for other programs. The projected costs of the options indicate that the share of the federal budget going to commodity programs would not likely reach historic levels.

OUTLAY ESTIMATES

Base Projections

Budget outlays for commodity programs are highly sensitive to market prices which are affected by weather and export demand. Consequently, outlay projections are the product of critical assumptions about these variables. The outlay estimates shown in Tables 5, 6, and 8 do not reflect the impacts of unusually good or bad weather in the United States or abroad on yields or exports in any given year. 1/

Estimated Commodity Credit Corporation (CCC) outlays for price support and related programs are given in Table 5. Outlays for the major commodities--wheat, feed grains, cotton, and rice--are highlighted. 2/ For the major commodities, outlay components are deficiency payments, disaster payments, and net lending. The term "direct payments" includes both deficiency and disaster payments; they represent unrecoverable federal outlays. Approximately

1/ The CBO's estimates of outlays for S. 275 and H.R. 7171 are included in committee reports on the bills (95-180 and 95-348, respectively.) Detail underlying the estimates can be found in these reports.

2/ Soybean program costs are estimated to be negligible under all four alternatives.

TABLE 5. ESTIMATED COMMODITY CREDIT CORPORATION OUTLAYS FOR PRICE SUPPORT AND RELATED PROGRAMS: BY FISCAL YEARS, IN BILLIONS OF DOLLARS

Option and Item	1978	1979	1980	1981	1982	Total	Average 1978-82
Current policy <u>a/</u>							
Wheat	0.7	0.4	0.6	0.8	0.9	3.5	0.7
Feed grains	0.6	0.7	0.7	0.7	0.8	3.5	0.7
Cotton	0.1	0.1	0.1	0.1	0.1	0.6	0.1
Rice	0.1	0.1	0.1	0.1	0.2	0.6	0.1
All other <u>b/</u>	1.1	1.2	1.4	1.6	1.9	7.3	1.5
Total	2.7	2.5	2.9	3.4	3.9	15.4	3.1
S. 275 <u>c/</u>							
Wheat	1.6	1.4	1.3	1.3	1.3	6.9	1.4
Feed grains	0.6	2.1	2.7	2.7	2.8	11.0	2.2
Cotton	0.1	0.1	0.3	0.3	0.4	1.1	0.2
Rice	0.1	0.1	0.1	0.1	0.2	0.6	0.1
All other <u>b/</u>	1.1	1.0	1.1	1.2	1.5	5.9	1.2
Total	3.5	4.7	5.5	5.5	6.2	25.4	5.1
H.R. 7171 <u>c/</u>							
Wheat	1.1	1.1	1.3	1.5	1.6	6.5	1.3
Feed grains	0.6	0.9	0.9	1.6	2.0	6.1	1.2
Cotton	0.1	0.1	0.1	0.2	0.2	0.7	0.1
Rice	0.1	0.1	0.1	0.1	0.1	0.5	0.1
All other	1.1	1.0	1.1	1.2	1.5	5.9	1.2
Total	3.0	3.1	3.6	4.6	5.4	19.6	3.9
Administration proposal <u>d/</u>							
Wheat	0.7	0.9	1.1	1.2	1.4	5.3	1.1
Feed grains	0.6	0.7	0.5	0.5	0.8	3.1	0.6
Cotton	0.1	0.1	0.0	0.2	0.3	0.7	0.1
Rice	0.1	0.0	0.0	0.0	0.0	0.1	0.0
All other <u>b/</u>	1.1	1.1	1.2	1.4	1.7	6.4	1.3
Total	2.7	2.8	2.8	3.3	4.2	16.8	3.1

NOTE: Numbers are rounded to the nearest \$100 million.

a/ CBO estimate, June 2, 1977. Based on current law and USDA administrative actions.

b/ Includes dairy, soybeans, peanuts, tobacco, short-term export credit, the storage facilities program, net interest, other minor commodity programs and administrative expenses.

c/ CBO cost estimates are included in the Senate and House bill reports (95-180 and 95-348, respectively). Detail underlying these estimates can be found in the reports.

d/ CBO preliminary estimate, May 23, 1977.

80 percent of the estimated outlays are direct payments. Net lending reflects the difference between loans made and loans repaid in a given fiscal year. Unlike direct payments, commodity loans do not necessarily represent unrecoverable federal outlays. Losses are realized only if commodities are forfeited to the CCC, and are subsequently sold for less than the loan value.

As shown in Table 5, both S. 275 and H.R. 7171 would have costs substantially higher than either current policy or the Administration proposal. S. 275 has the highest five-year total cost, exceeding the total costs of H.R. 7171 by \$5.8 billion and of the Administration proposal by \$8.6 billion. Costs associated with current policy and Administration proposals are very similar.

The major difference between S. 275 and the other options is the level of feed grain program costs. Feed grain outlays under S. 275 exceed those in the H.R. 7171 by \$4.9 billion, and the Administration proposal by \$7.9 billion. Although S. 275 and H.R. 7171 have comparable estimated five-year wheat program costs, the Administration proposal is \$1.6 billion less than S. 275 and \$1.2 billion less than H.R. 7171. The Administration proposal is \$1.8 billion higher than current policy in wheat outlays, but \$0.4 billion lower in feed grain outlays. The costs of the cotton and rice programs do not differ significantly under any of the four options--cotton outlays are somewhat higher under S. 275, and rice outlays are somewhat lower under the Administration proposal, when compared to current policy.

Table 6 shows the distribution of estimated direct payments among the major commodities. Under current policy, H.R. 7171, and the Administration proposal, over half of the direct payments would go to wheat producers. On the other hand, under S. 275, only about one-third of total direct payments would go to wheat producers, and feed grain producers would receive the bulk of the remainder. Direct cotton payments would be higher under S. 275 than under the other three options. Under the Administration proposal, rice payments are not projected after fiscal year 1978. Under current policy, S. 275, and H.R. 7171, estimated costs would be about \$0.1 billion per year.

TABLE 6. ESTIMATED DIRECT PAYMENTS a/ FOR MAJOR COMMODITIES: BY FISCAL YEARS, IN BILLIONS OF DOLLARS

Option and Commodity	1978	1979	1980	1981	1982	Total	Average 1978-82
Current policy							
Wheat	0.1	0.2	0.4	0.6	0.7	2.1	0.4
Feed grains	0.2	0.2	0.2	0.2	0.2	1.0	0.2
Cotton	0.1	0.1	0.1	0.1	0.1	0.4	0.1
Rice	0.1	0.1	0.1	0.1	0.2	0.6	0.1
Total	0.5	0.6	0.8	1.0	1.1	4.1	0.8
S. 275							
Wheat	1.0	1.1	0.9	0.9	0.9	4.8	1.0
Feed grains	0.2	1.6	2.2	2.1	2.2	8.4	1.7
Cotton	0.1	0.1	0.3	0.3	0.4	1.1	0.2
Rice	0.1	0.1	0.1	0.1	0.2	0.6	0.1
Total	1.4	2.9	3.5	3.4	3.7	14.9	3.0
H.R. 7171							
Wheat	0.5	0.8	1.1	1.2	1.4	5.1	1.0
Feed grains	0.2	0.4	0.5	1.1	1.4	3.6	0.7
Cotton	0.1	0.1	0.1	0.2	0.2	0.7	0.1
Rice	0.1	0.1	0.1	0.1	0.1	0.5	0.1
Total	0.9	1.4	1.8	2.6	3.1	9.9	2.0
Administration proposal							
Wheat	0.7	0.7	0.8	1.0	1.2	3.9	0.8
Feed grains	0.6	0.1	0.0	0.0	0.2	0.5	0.1
Cotton	0.1	0.1	0.0	0.2	0.3	0.7	0.1
Rice	0.1	0.0	0.0	0.0	0.0	0.1	0.0
Total	0.5	0.9	0.8	1.2	1.7	5.2	1.0

NOTE: Numbers are rounded to the nearest \$100 million.

a/ Includes deficiency payments and disaster payments.

Projections Assuming Set-Aside and/or Bad Weather

In addition to assuming normal weather, the base projections assume that the Secretary of Agriculture will impose set-aside provisions as a condition for eligibility of payments and loans on wheat farmers only for the 1978 crop. Table 7 shows the estimated average effects on direct payments when set-asides of ten million acres are ordered in crop years 1978 and 1979, respectively. In crop year 1979, a set-aside of 2.7 million acres of feed grains is also assumed. The set-aside analysis demonstrates the potential effects of reduced production and stocks from the levels in the base projections. ^{3/} It is apparent that under certain conditions, set-asides can be an effective tool to reduce federal outlays for agricultural programs. Table 7 also shows the effects on direct payments when bad weather, as expressed by low corn and wheat yields, is experienced in crop year 1979. Outlays for both wheat and feed grains are somewhat higher than when set-aside is assumed. Outlays under current policy would be similar to those for the Administration bill.

Both set-aside and bad weather reduce government outlays by reducing production and, consequently, increasing market prices. The Secretary of Agriculture can impose set-aside as market conditions dictate. However, the weather is an uncontrolled variable which can either cancel out or reinforce this policy decision. The last column in Table 7 shows direct payments for wheat and feed grains when set-aside and bad weather are both assumed. In this case, weather reinforces the policy decision, and government expenditures are lower than under either assumption alone. The combination of set-aside and bad weather would have significant effects on the CPI for food, substantially more than the effects of either event individually. The cost of nonagricultural government programs indexed to the CPI would, in turn, increase. These results are discussed more fully in Chapter IV.

^{3/} The effect of set-aside on market prices and budget costs is primarily determined by export demand and stock levels. In the base projections, higher stocks and lower export assumptions would cause the cost savings to be overstated. Further, it is assumed that the set-aside provisions are fully effective in reducing production; that is, there is full participation and no slippage (planted acres are reduced by the target amount). The less the effectiveness of set-aside, the smaller will be the cost savings.

TABLE 7. ESTIMATED FIVE-YEAR AVERAGE DIRECT PAYMENTS a/ FOR WHEAT AND FEED GRAINS: BASE PROJECTIONS, SET-ASIDE, BAD WEATHER, IN BILLIONS OF DOLLARS

Option and Commodity	Base	Set-Aside <u>c/</u>	Bad Weather <u>d/</u>	Set-Aside and Bad Weather
S. 275				
Wheat	1.0	0.6	0.7	0.4
Feed grains	1.7	0.8	1.0	0.5
Total	<u>2.7</u>	<u>1.4</u>	<u>1.7</u>	<u>0.9</u>
H.R. 7171				
Wheat	1.0	0.3	0.5	0.3
Feed grains	0.7	0.1	0.3	0.1
Total	<u>1.7</u>	<u>0.4</u>	<u>0.8</u>	<u>0.4</u>
Administration proposal				
Wheat	0.8	0.3	0.4	0.2
Feed grains	0.1	0.1	0.1	0.1
Total	<u>0.9</u>	<u>0.4</u>	<u>0.5</u>	<u>0.3</u>

NOTE: Numbers are rounded to the nearest \$100 million.

a/ Includes deficiency payments and disaster payments.

b/ See Table 6.

c/ Assumes set-aside on wheat in crop years 1978 and 1979, and set-aside on corn in crop year 1979.

d/ Assumes a decline in average wheat yield to 28.7 bushels per acre and a decline in average corn yield to 82.7 bushels per acre in crop year 1979. The relative decline of projected yields from 1977 to 1978 corresponds to decreases from 1973 to 1974.

AGRICULTURE OUTLAYS IN RELATION TO THE FEDERAL BUDGET

While the estimated direct payments shown in Table 6 amount to several billion dollars, perspective is gained by examining them in light of the total federal budget. Table 8 shows the average annual direct payments to agriculture and their share of federal budget outlays. For fiscal years 1971-1974, average annual direct payments were \$2.7 billion, an average of about 1.2 percent of the federal budget. From fiscal year 1966 to fiscal year 1970, average payments were lower, by about \$2.2 billion, but a higher share of the federal budget (1.5 percent).

During fiscal years 1975-1977, average annual payments dropped substantially, and accounted for only 0.1 percent of the total federal budget. This sharp decline was attributable to high farm prices and basic changes in the method of computing commodity payments. ^{4/} Most of the payments made were legislated by the disaster payments provisions of the 1973 Agriculture and Consumer Protection Act.

For fiscal year 1978, all options would be likely to increase direct payments over the 1975-1977 average level (Table 8). However, the level and share of the federal budget estimated for each option would be substantially below those for the 1966-1970 and 1971-1974 periods. For fiscal years 1978-1982, S. 275 would have estimated average annual direct payments of \$3.4 billion, which exceeds the peak level of 1971-1974. However, as a share of the federal budget, they would be only about half of the 1971-1974 percentage. Under H.R. 7171, average annual direct payments for the 1979-1982 period are projected at \$2.2 billion, the same as for the 1966-1970 period. As a share of the federal budget, however, they would be only one-fourth as large. Direct payments under the Administration proposal and current policy would be substantially lower than under either S. 275 or H.R. 7171.

In constant dollars (1967 = 100) ^{5/} terms, the average annual direct payment for fiscal years 1971-1974 was \$2.1 billion. Comparative constant dollar costs for fiscal years 1979-1982 are estimated

^{4/} See the CBO's Budget Issue Paper, Food and Agriculture Policy Options, February, 1977.

^{5/} The index of prices paid by farmers for family living items (1967 = 100) was used to compute constant dollars.

at \$1.6 billion under S. 275, \$1.1 billion under H.R. 7171, and \$0.5 billion under current policy and the Administration's proposal. All are substantially below historic levels.

Though there are other criteria for determining the appropriate federal role in agriculture, this suggests that under all options the portion of the federal budget going to commodity programs is unlikely to reach historic levels.

TABLE 8. DIRECT PAYMENTS TO AGRICULTURE AS A PERCENT OF FEDERAL BUDGET OUTLAYS

Fiscal Year	Average Annual Direct Payments (billions of current dollars) <u>a/</u>	Average Percentage of Federal Budget Outlays <u>b/</u>
1961-1965	1.0	0.9
1966-1970	2.2	1.5
1971-1974	2.7	1.2
1975-1977	0.5	0.1
1978 (Estimated)		
Current Policy	0.5	0.1
S. 275	1.4	0.3
H.R. 7171	0.9	0.2
Administration Proposal	0.6	0.1
1979-1982 (Estimated)		
Current Policy	0.9	0.2
S. 275	3.4	0.6
H.R. 7171	2.2	0.4
Administration Proposal	1.2	0.2

a/ Direct payments through commodity programs including disaster payments. Numbers are rounded to the nearest \$100 million.

b/ For each multiple-year period, the unweighted average of the percentages for individual years was used. For fiscal years 1978-1982, total federal budget outlays are those projected by CBO in Budget Options for Fiscal Year 1978, February, 1977.

CHAPTER IV. EFFECTS OF THE FARM PROPOSALS ON CONSUMERS AND
 THE ECONOMY

None of the three major farm proposals before Congress (S. 275, H.R. 7171, and the Administration proposal) is expected to have a major impact on the general economy. The impact on consumer food prices is expected to be minimal. While, in general, the proposals would involve additional budget outlays, the magnitude of these additions by themselves would not have major impacts on output and employment. The proposals would redistribute income toward producers of the specific commodities, especially landowners. This redistribution would take place largely through the federal budget, and to a lesser degree through slightly higher food prices. In addition, there is considerable uncertainty over whether or not the consumer and the U.S. economy will continue to be exposed to inflationary shocks from the farm-food sector. The answer depends in part on the policies chosen by the Secretary of Agriculture under the broad discretionary authority granted in the proposals.

IMPACTS ON FOOD PRICES

As with the 1973 farm legislation, farmers would be guaranteed a minimum price for certain basic commodities, which helps to assure an adequate supply of food for the consumer. The minimum price floors established by the loan rates on corn and wheat are not expected, however, to have major impacts on retail food prices. 1/

1/ Under the Congressional proposals, the Secretary of Agriculture would have authority to set loan rates higher but not lower than minimum rates specified in the proposals. The Administration proposal gives the Secretary the authority to lower loan rates.

As a nation, we would pay more for food under the proposals compared with current policy; but this would primarily occur through higher deficiency payments rather than higher food prices.

The potential significance of increases in the cost of grain for food prices is illustrated by the breakdown of food commodities in the Consumer Price Index. Food purchases have a weight of about 25 percent in the Consumer Price Index. Grain is a major ingredient in the production of approximately 60 percent of food purchased for home consumption. Most of the grain is consumed indirectly through meat, poultry, and dairy products, but some is consumed directly in the form of cereals and bakery products. Overall, the farm cost of food purchased in grocery stores amounts to about 40 percent of the total purchase price, but this fraction varies considerably with the particular commodity. In the case of cereals and bakery products, this fraction is about 15 percent; for meat, 55 percent; and for dairy products, 51 percent.

The loan rates for wheat and corn embodied in the Administration proposal and in H.R. 7171 are not above base projections of prices for those commodities. The loan rates embodied in S. 275 are approximately 8 to 12 percent above the base projections for wheat prices during the period 1978-1981. The loan rates for corn in S. 275 are slightly above base projections in 1980 and approximately 6 percent above in 1981.

An increase of 12 percent in wheat prices might translate into about a 2 percent increase in the retail price of cereals and bakery goods, or on the order of 1/2 cent to 1 cent in the price of a loaf of bread. The overall impact of the loan rates for wheat contained in S. 275 could be to raise food prices slightly, on the order of 0.2 percent to 0.3 percent.

Any assessment of the impact of these proposals on food prices has to be conditioned on the highly uncertain course of future grain markets and on the specific policies adopted. The options might not affect retail food prices by very much

if conditions are similar to those assumed in the baseline projections. The impact on consumers could be greater under some scenarios involving years of good or poor harvest. The risk of damage to consumer price stability from bad harvests might be compounded if there were a major reliance on production controls.

By setting a floor under prices of certain farm commodities, but not a ceiling, the proposals could contribute an upward bias to raw food prices. Whether or not this would occur depends on the policies adopted in managing the stocks or reserves of farm commodities.

IMPACTS ON THE ECONOMY

Estimates of the impact of the increase in direct budget outlays resulting from the three proposed farm bills, compared with a projection of current policy, are summarized in Table 9.

These impacts, taken by themselves, are not large. Current dollar GNP would be increased only slightly by each of the three proposals for calendar year 1978. In general, S. 275 would have the largest impact of the three--raising current dollar GNP \$3.7 billion in 1981, compared with \$2.1 billion for H.R. 7171 and \$0.2 billion for the Administration proposal.

The net budget costs of the proposals would be less than their direct costs because of feedback effects on the federal budget from the additional stimulus to the economy. For example, the net addition to budget costs of S. 275 for the four-year period (1978-1981) would be \$5.4 billion, compared with direct costs of \$8.1 billion. S. 275 would have the largest impact on the federal deficit, followed by H.R. 7171, with the Administration proposal having the least impact.

The additional outlays from the proposals are not by themselves sufficiently large to have a notable effect on inflation.

TABLE 9. IMPACT OF FARM PROPOSALS ON THE ECONOMY: ADDITIONAL DIRECT BUDGET OUTLAYS COMPARED WITH CURRENT POLICY*

	1978	1979	1980	1981
GNP (billions, current dollars)				
S. 275	1.1	2.6	3.8	3.7
H.R. 7171	0.6	1.2	1.5	2.1
Administration Proposal	0.2	0.4	0.2	0.2
Employment (thousands)				
S. 275	22	53	62	44
H.R. 7171	9	23	25	25
Administration Proposal	<u>a/</u>	9	6	<u>a/</u>
Direct Budget Cost**				
S. 275	0.8	2.3	2.6	2.4
H.R. 7171	0.3	0.8	1.0	1.6
Administration Proposal	<u>b/</u>	0.3	<u>b/</u>	0.2
Net Budget Cost**				
S. 275	0.6	1.6	1.7	1.5
H.R. 7171	0.2	0.5	0.6	1.1
Administration Proposal	<u>b/</u>	0.2	-0.1	0.2
Inflation-GNP Deflator (per- cent increase)				
S. 275	<u>c/</u>	<u>c/</u>	<u>c/</u>	0.1
H.R. 7171	<u>c/</u>	<u>c/</u>	<u>c/</u>	<u>c/</u>
Administration Proposal	<u>c/</u>	<u>c/</u>	<u>c/</u>	<u>c/</u>

SOURCE: CBO estimates.

*Includes estimated increases in deficiency payments and disaster payments. It does not include operations of the Commodity Credit Corporation.

**Cost of proposals, minus cost of current policy, fiscal years.

a/ Less than 1,000.

b/ Less than \$0.1 billion.

c/ Less than 0.05 percent.

INCOME DISTRIBUTION

The proposals would tend to stabilize farm income. In addition, the proposals would redistribute income toward producers of the commodities, especially landowners. To the extent that the proposals would redistribute income, it is even more difficult to identify who pays the costs. Essentially two mechanisms are involved: the transfer of income through the federal budget and possibly higher food prices and their varying effects on different income levels. The previous analysis indicated that the redistribution of income would take place primarily through the federal budget, since food prices are relatively unaffected.

The Benefits

As discussed in the chapter on farm sector impacts, the benefits of the redistribution of income tend to go disproportionately to large producers (primarily family farmers) of the commodities, especially landowners. An estimated half of the government payments would go to the approximately 4 percent of farms with annual sales of over \$100,000. Moreover, as a group, landowners who have held land for several years have experienced large capital appreciation.

Compared to a continuation of current policy over 1978-81, it was estimated in Chapter II that S. 275 would add to farm income by an annual average of \$1.9 billion in direct payments; H.R. 7171, \$1.0 billion; and the Administration proposal, \$0.3 billion. In addition, S. 275 and H.R. 7171 would add \$0.8 billion and \$0.3 billion, respectively, in 1977. The higher wheat and feed grain market prices under S. 275 due to loan rates would add approximately \$1.0 billion annually to farm income during 1979-81.

The Costs

Market Effects. Factors that increase the price of food have a disproportionate effect on lower- and moderate-income families and on larger families. As indicated by the data in Table 10, food purchases have an especially large weight in the budgets of such families, although the food stamp program provides some cushion against higher food prices for lower-income households.

While none of the proposals are expected to have much effect on retail food prices, an example of how higher food prices might impact on families at different income levels may be useful. For example, according to the data in Table 10, an increase in food prices of 1 percent would cause an increase in food costs of about \$12 per year for a family of two with an annual income of \$3,500 (in 1972 dollars), and about \$18 per year for a family of two with income of \$17,500. However, this increase in food costs would represent about 0.3 percent of the low-income family's income, and about 0.1 percent of the higher-income family's income.

The slightly higher market prices for wheat and feed grains embodied in S. 275 would add approximately \$0.5 billion annually to retail food costs during 1979-81, or about 0.2 percent.

Budget Effects. It is especially difficult to identify with much precision who bears the burden, or what the opportunity costs are, of an increase in outlays for a particular program in the federal budget. The broad implications include some combination of higher taxes and/or lower outlays for other programs, however.

The budget analysis presented in Chapter III indicates that compared with current policy S. 275 would increase budget outlays for direct commodity payments by an average of \$2.2 billion annually for fiscal years 1978-82; H.R. 7171 by \$1.2 billion annually; and the Administration proposal by \$0.2 billion annually (see Table 6).

If the proposals cause domestic commodity prices to deviate very far from world prices, export subsidies might also become part of the budget costs.

TABLE 10. PROPORTION OF INCOME BEFORE TAXES SPENT ON FOOD BY INCOME AND FAMILY SIZE: CALENDAR YEAR 1972, IN PERCENTS

All Income before Taxes (in dollars)	Family Size						Total
	1	2	3	4	5	6+	
All Families	16	14	15	16	17	20	16
Under 3,000	36	54	74	96 _{a/}	130 _{a/}	108 _{a/}	48
3,000- 3,999	22	34	40 _{a/}	41 _{a/}	45 _{a/}	51 _{a/}	32
4,000- 4,999	16	27	30	39 _{a/}	38 _{a/}	41 _{a/}	26
5,000- 5,999	17	20	25	30 _{a/}	31 _{a/}	40 _{a/}	23
6,000- 6,999	13	20	23	29 _{a/}	30 _{a/}	38 _{a/}	22
7,000- 7,999	13	18	21	25	26 _{a/}	33 _{a/}	20
8,000- 9,999	12	15	19	21	24	27	18
10,000-11,999	12	13	17	19	23	22	17
12,000-14,999	10	12	15	17	18	21	15
15,000-19,999	10 _{a/}	10	12	15	15	19	13
20,000-24,999	8 _{a/}	9	10	12	14	16	12
25,000+	5 _{a/}	6	8	8	10	10	8

SOURCE: Calculated from U.S. Department of Labor, Bureau of Labor Statistics, Diary Data 1972, Consumer Expenditure Survey Series, Report 488-1 (1975).

NOTE: Food expenditures include purchases with food stamps, while family income does not include the subsidized value of food stamps.

a/ Estimate based on fewer than 70 observations.

ADMINISTRATIVE DISCRETION

Since the early 1970s, the economy has several times been subjected to inflationary shocks from sharply rising food and fuel prices. Although sharp changes in food prices have stemmed from several causes, one of the important causes has been supply disruption in the production of grain due to the weather, either in the U.S. or in other producing countries.

Each of the proposals provides for the tools of stock accumulation and for the use of production controls, and each provides significant discretion to the Secretary of Agriculture in their use. However, none of the proposals explicitly addresses the problem of inflation shocks or provides explicit guidelines on how minimizing this risk is to be traded off against other objectives of the legislation.

The Impact of Food Price Shocks

When the prices of raw food prices rise sharply, there are ramifications that extend far beyond the farm sector. For example, Data Resources, Incorporated (DRI), recently analyzed the impacts of a drought-reduced harvest in 1977 and 1978 on the economy in 1977-78. The results, summarized in Table 11, indicate that inflation worsens and output in the economy declines slightly, compared with the base forecast. 2/

The federal budget is also affected by inflationary shocks from the food sector. In general, inflation causes

2/ For a description of the simulation, see Data Resources, Inc., The Data Resources Review, April 1977. For a more detailed discussion of the impact of an unexpected increase in food prices on the economy, see U.S. Food and Agricultural Policy in the World Economy, CBO Report, 1976, especially Chapter IV.

TABLE 11. ESTIMATED IMPACT OF POOR HARVEST ON THE U.S.
ECONOMY: NET EFFECT ON ANNUAL RATES OF CHANGE,
IN PERCENTAGE POINTS

Item	1977	1978
WPI--Farm Products	1.7	4.8
WPI--All	0.3	1.0
CPI--Food	0.9	2.5
CPI--All	0.3	0.7
GNP Price Deflator	0.1	0.4
Real Consumption--Food	-0.5	-1.0
Real Consumption--All	-0.1	-0.3
Real Business Fixed Investment	0	-0.6
Real GNP	-0.2	-0.3
After-Tax Profits	0.2	-0.1

SOURCE: Data Resources, Inc., The Data Resources Review, April 1977, p. 1.17.

both federal budget revenues and expenditures to increase. ^{3/} The increase in current dollar incomes associated with inflation causes tax revenues to increase. On the outlay side, higher food prices trigger higher federal outlays for the food stamp program, and increases in the cost of living trigger increases in social security benefits and in retirement pay for retired federal government workers. If the increase in prices depresses output and production in the nonfarm sector, this can cause higher government transfer payments, for example, for the unemployment insurance program. On the other hand, when the inflation originates from higher grain prices, government outlays for the commodity programs tend to be sharply curtailed. Not only would deficiency payments decline in years of poor harvests but sales of grain from government stockpiles could contribute toward a more restrictive budget, unless offset.

^{3/} According to the DRI simulation, the impact on tax receipts would take relatively longer to materialize compared with the impact on government expenditures. The estimated impacts for 1978 and 1980 are as follows (in billions of current dollars):

	<u>1978</u>	<u>1980</u>
Tax Receipts	0.2	3.4
Government Expenditures	1.2	1.9
Government Deficit	1.0	-1.5

Policy Implications

The experience of the 1970s illustrates some of the difficulties in determining how to use the policy tools of managing grain stocks and production controls. It is now generally felt that in the early 1970s production controls were used too long after conditions in world grain markets had become potentially inflationary. At a later stage, embargoes on grain exports, which proved controversial, were used in an attempt to contain inflation.

Under current policy, the Administration has authority to encourage the accumulation of grain stocks during years of good harvests and low prices; and the grain stocks could be used to dampen inflationary shocks caused by variability in growing conditions. The Administration recently initiated a resale program under which farmers were offered a three-year loan contract which provides incentive for farmers to hold grain off the market. The Administration proposal would not alter the existing discretion of the Secretary to manage grain stocks.

The Congressional proposals would encourage the growth of privately held grain stocks during years of good harvests and low prices by extending loans to producers under favorable terms.

Whether publicly or privately held, grain stocks or reserves can have the effect of dampening fluctuations in grain prices. But the maintenance of such stocks can be costly for the federal budget and depress farm prices. On the other hand, the acreage set-aside tool can be used to limit production and to reduce budgetary costs. However, set-asides with normal weather may mean a small rise in food prices but make possible a larger inflationary shock if bad weather occurs.

CBO studied the implications of a bad harvest in 1979 for wholesale food prices, under alternative assumptions about the use of set-asides. By 1980, the lower yields were associated with an increase of about 2.3 percent in the wholesale price index for food at the farm level. If set-asides for wheat and corn had been used, in a "normal" year they might have raised wholesale food prices by about 4.2 percent. With the bad harvest and set-aside combination, wholesale food prices were 6.4 percent above the base in 1980 and retail food prices were 2.6 percent above the base projection.