

Possible Economic Consequences of Reverting to Permanent Legislation or Eliminating Price and Income Supports

INTRODUCTION

Concern with the financial well-being of the farm sector, its growing dependence on costly Federal programs, and the changing agricultural trade environment have combined since 1981 to generate widespread interest in reevaluating price and income supports when the current program expires in 1985. Views on the direction that support programs should take in 1985 vary widely and range from expanding the Government's role in setting farm returns--possibly by reverting to the interventionist programs provided for in the permanent support statutes initially enacted in the 1930's--to eliminating price and income supports entirely.

This report analyzes the impacts of adopting either of these two outerbound support policy alternatives on the farm sector, the general economy, and the world market over the remainder of the 1980's. While neither alternative is likely to be adopted in the simplified form assumed here, analyzing their impacts provides insights into the general operation of support programs that will be helpful in evaluating the policies that are ultimately considered.

Alternative Support Program Provisions

The price and income programs currently in place were authorized in the Agriculture and Food Act of 1981 and subsequent legislation as temporary amendments to the permanent support statutes originally enacted in the 1930's. Congress has typically avoided reverting to the permanent support programs by suspending them--rather than repealing or modifying them--with the passage of new, but temporary, legislation every 4 years. If no new legislation is passed in 1985 and agreement is not reached to extend the 1981 Act, farm support programs would automatically revert to those called for in the permanent statutes.

While their provisions vary somewhat by commodity, the permanent support programs provide for minimum producer prices, set without reference to supply or demand conditions in the market, for the basic commodities. ^{1/} Government-supported prices for these commodities would be set high enough to guarantee producers some minimum level of income by insuring some minimum degree of parity between the prices farmers receive for their products and the prices

^{1/} The program commodities include wheat, corn, barley, rye, oats, sorghum, rice, cotton, cottonseed, peanuts, soybeans, tobacco, sugar, milk, honey, wool, and mohair. Honey, cottonseed, peanuts, wool, and mohair are not dealt with in detail in this report.

they pay for inputs and living expenses. ^{2/} The Secretary of Agriculture would be required in most cases to support commodity prices at high enough levels to guarantee producers 50 to 90 percent of parity using the 1910-14 ratio as the benchmark.

This use of the 1910-14 ratio, unadjusted for growth in productivity over the last 70 years, works to push the real income support provided for in the permanent programs up sharply over time. With increased productivity tripling farm output per unit of input since 1910-14, guaranteeing producers the same ratio between prices paid and received as was in effect 70 years ago would generate roughly three times the real net income. Guaranteeing farmers the same buying power they enjoyed in 1910-14 would require a ratio of prices paid to received of less than 40 percent.

Real commodity prices have tended to fall over time, reflecting this growth in productivity, and are currently less than 35 percent of the 1910-14 level. Hence, even with supports set at the lower end of permanent legislation's 50- to 90-percent parity range, commodity prices would rise sharply above recent market-clearing levels and increase 4 to 6 percent per year thereafter in nominal terms regardless of market conditions. The U.S. Department of Agriculture (USDA) would be charged with operating a nonrecourse loan or direct purchase program to support parity-linked producer prices in periods of surplus and could dispose of excess stocks if market prices moved above support levels.

Given the support prices in question, commodity prices would be high enough to virtually isolate U.S. agriculture from domestic and world market forces. Producers would become increasingly dependent on nonrecourse loans or direct purchases to support incomes well above market-clearing levels and to dispose of the growing share of their expanding output that the market would not absorb at parity-linked prices.

If, on the other hand, no new legislation were enacted in 1985 and the permanent statutes were repealed, all Government intervention in the market to support farm prices and incomes would end. Provision would have to be made for the disposal of the sizable Commodity Credit Corporation (CCC) and farmer-owned reserve stocks on hand at the start of the 1986 marketing year. But commodity prices and farm incomes would be set by market forces rather than by Government programs.

Report Scope and Organization

This report is organized into nine sections and three appendices. The first section of the report summarizes the major provisions of the permanent support statutes and the assumptions made under the no-support scenario regarding the Government's withdrawal from the market. The second section summarizes the

^{2/} The concept of parity was originally defined in the Agricultural Adjustment Act of 1933. The Act specifies that Congress will "...establish and maintain such balance between the production and consumption of agricultural commodities, and such marketing conditions thereafter, as will reestablish prices to farmers at a level that will give agricultural commodities a purchasing power with respect to articles that farmers buy equivalent to the purchasing power of agricultural commodities in the base period. The base period in the case of all agricultural commodities except tobacco shall be the prewar period, August 1909-July 1914. In the case of tobacco, the base period shall be the postwar period, August 1919-July 1929."

assumptions made regarding the U.S. and world market setting over the remainder of the 1980's and the role that setting plays in shaping policy impacts. The third section discusses the impacts of the two scenarios on crop and livestock producers and provides the basis for the financial analysis summarized in the fourth section.

The fifth section of the report evaluates natural resource and conservation impacts, while the sixth section summarizes broader agribusiness impacts. International trade impacts and effects on Government expenditures, food prices, and the general economy are dealt with in the seventh and eighth sections of the report. The ninth section of the report is made up of concluding notes and is followed by three appendices. The first appendix reports on the effects that fluctuations in yields and exports could have on the commodity prices, farm incomes, food prices, and Government expenditures projected under the two scenarios. The second appendix reports in greater detail on the elasticities used to estimate trade impacts. A glossary of agricultural terms used in the report appears in the third appendix.

Given the extent to which support programs affect the farm sector and the general economy, projections for a broad range of indicators were developed in the process of completing the study. While many of these projections appear in the text, they are cited not as official USDA forecasts, but as general indicators of the direction and magnitude of the changes likely with more or less Government involvement in the market.

PROGRAM PROVISIONS UNDER THE PERMANENT LEGISLATION AND NO-SUPPORT SCENARIOS

While the general directions of policy under the permanent legislation and no-support scenarios are clear, the specific program provisions in effect are subject to debate. Many of the permanent support provisions could ultimately require judicial interpretation. How the Government would withdraw from the market under the no-support scenario is no less important, and also open to question. This section summarizes the program provisions assumed to be in place under each of the scenarios analyzed in this study.

Permanent Legislation Program Provisions

Legislative authority for most of the support programs currently in place is contained in the Agriculture and Food Act of 1981, the Omnibus Budget Reconciliation Act of 1982, the Dairy and Tobacco Adjustment Act of 1983, and the Agricultural Programs Adjustment Act of 1984. These acts suspended the support programs provided for in the permanent statutes, including the Agricultural Adjustment Act of 1933 (as amended), the Agricultural Act of 1949 (as amended), the Commodity Credit Corporation Charter Act of 1949 (as amended), and the Agricultural Trade Development and Assistance Act of 1954. Congress has traditionally suspended--rather than repealed or modified--these permanent statutes by enacting a new but temporary farm bill every 4 years. More recently, Congress has also tended to pass annual farm bills that suspend or modify provisions of the latest 4-year farm bill as well.

Should the 1981-84 acts and their amendments not be replaced or extended when they expire in 1985, most of the support programs currently in place would continue, but as provided for in the appropriate permanent statute (table 1). Of particular concern for this study are the permanent legislation provisions affecting grain, cotton, soybean, peanut, tobacco, sugar, wool and mohair, milk, and honey prices and incomes--provisions commonly referred to

collectively as the commodity programs. The major commodity program provisions are summarized below in two sections, the first dealing with mandatory commodity programs and the second dealing with programs operating at the discretion of the Secretary.

Mandatory Commodity Programs

Many of the commodity programs would change substantially with a reversion to permanent legislation and specific support provisions would vary more widely between commodities than under the current program. The programs in place for wheat, upland cotton, tobacco, and peanuts in particular would be far more complex than for the other program commodities. This reflects concern when the permanent statutes were initially enacted with surplus problems with these four commodities that did not extend to the rest of the sector.

In the case of wheat and upland cotton, permanent legislation would provide for price supports set at 50 to 90 percent of parity. Even with the link between support levels and parity set at the lower end of the 50- to 90-percent range,

Table 1--Status of program authorities upon expiration of the Agriculture and Food Act of 1981 and subsequent legislation

Program	Reverts to permanent legislation:	Expires
Extra-long staple cotton	X	
Upland cotton <u>1/</u>	X	
Dairy:		
Base plans		X
CCC donations to military and veterans hospitals		X
Indemnity program		X
Minimum price support	X	
Feed grains <u>1/</u>	X	
Peanuts	X	
Rice <u>1/2/</u>	X	
Soybeans <u>1/2/</u>	X	
Sugar <u>2/</u>	X	
Tobacco	X	
Wheat <u>1/</u>	X	
Wool and mohair	X	
CCC minimum sales price	X	
Food stamps		X
Payment limitation		X
P.L. 480 (Titles I and II)		X
Set-aside		X
Farmer-owned grain reserve	X	

1/ Although there is permanent legislative authority for wheat, feed grain, upland cotton, and rice programs, authority for major features of existing programs, such as target prices and set-asides, expires.

2/ These programs would become discretionary with the expiration of the 1981 Act. As noted below, however, the Secretary is assumed to offer the producers in question a program comparable to the program mandated for feed grains.

wheat and cotton support prices would move up sharply above recent market-clearing levels. USDA would operate nonrecourse loan or direct purchase programs to dispose of any excess supply that might result and could otherwise overhang the market.

The wheat and upland cotton statutes also provide for what appears to be considerable Government control over supply through acreage allotments and marketing quotas. However, this supply control is more apparent than real. A minimum 16-million-acre allotment for cotton is required by law; recent cotton plantings have averaged 10 to 12 million acres. While no acreage allotment minimum is specified for wheat, any reduction in wheat acreage has to be tied specifically to reducing excess CCC stocks rather than to improving the overall state of the market. These two acreage provisions severely limit the Secretary of Agriculture's ability to limit plantings. Similarly, the producer referendums required before wheat or cotton marketing quotas become effective also limit the Secretary's ability to influence the volume of products moving on the market. Comparable programs providing for higher price supports but stronger restrictions on plantings and marketings would be in place for peanuts and tobacco.

The programs in place for the other commodities are far less complex and reflect permanent legislation's overriding concern with boosting lagging farm returns rather than limiting supply. Supports set at 50 to 90 percent of parity would be in effect for corn, sorghum, barley, oats, rye, wool, mohair, and (at the Secretary's discretion) rice, sugar, and soybeans. There would be no provision for acreage allotments or marketing quotas. Milk purchases would be made at 75 to 90 percent of parity, and dairy farmers would be free to market as much milk as they wished. Nonrecourse loan or direct purchase programs open to all producers would be used to dispose of any surplus that might otherwise dampen producer prices.

Hence, higher price and income supports--rather than mandatory controls on acreage or marketings--would be the most significant change in policy involved in a reversion to permanent legislation. Detailed descriptions of the individual commodity programs follow.

Wheat: Several of the basic elements of the current wheat program would continue with a reversion to permanent legislation. Price and income support would continue through USDA operation of a nonrecourse loan or direct purchase program. However, the parity-linked prices, acreage allotments, and marketing quotas in place under permanent legislation would differ substantially from current program provisions.

Permanent legislation ties wheat price supports directly to parity. The specific level of support in effect would range from 50 to 90 percent of parity, depending on the program options chosen by the Secretary and by producers voting in referendum. Wheat acreage programs are tied to allotments that specify the maximum acreage a producer can plant in wheat but do not restrict acreage use in any other manner. This contrasts with current voluntary and paid acreage programs that require producers to put idled wheat acreage into conserving use in order to qualify for program benefits.

The Secretary can also announce wheat marketing quotas that, with producer approval, would make acreage allotments mandatory and limit the volume of wheat producers could market. The quota program also provides for different loan rates for wheat marketed for domestic food use, for other domestic uses,

and for export. But such a program could not be implemented without the approval of two-thirds of the wheat producers voting in a referendum.

The permanent wheat support legislation provides for the following sequence of events:

1. The Secretary of Agriculture announces a national acreage allotment for wheat and announces whether marketing quotas will be in effect for the upcoming crop year by no later than April 15 of each year--for example, by April 15, 1985, for the 1986 crop.
 - a. Marketing quotas are announced if the Secretary determines that, in the absence of quotas, the total supply of wheat in the coming marketing year would be excessive.
 - b. A national acreage allotment for wheat apportioned into allotments for individual farmers must be announced regardless of whether or not quotas are announced.
2. If marketing quotas are proclaimed, a national referendum of wheat farmers must be held by no later than August 1 of the year prior to the marketing year in which quotas will apply--for example, by August 1, 1985, for the 1986 crop.
3. If marketing quotas are approved by two-thirds or more of the farmers voting in the referendum, permanent legislation provides for:
 - a. mandatory restrictions on the wheat acreage producers can plant;
 - b. land-use penalties for exceeding acreage allotments;
 - c. no paid diversion program unless the national acreage allotment is less than 55 million acres;
 - d. operation of a farmer-owned reserve; and
 - e. a wheat marketing certificate program that provides for different support levels for wheat for domestic food use, other domestic uses, and export. The marketing certificate program stipulates that:
 - (1) loan rates for wheat for domestic food use accompanied by marketing certificates be set at no less than 65 percent nor more than 90 percent of parity;
 - (2) loan rates for wheat for domestic nonfood uses and for wheat accompanied by export certificates be set at a level not in excess of 90 percent of parity, taking into account world market prices and wheat's feed value relative to corn; and
 - (3) exporters must purchase export certificates and domestic processors must purchase domestic certificates, with the proceeds payable to cooperating farmers. In both cases, the value of the certificates would be equal to the difference between the loan rate for wheat accompanied by domestic marketing certificates and the price of wheat not accompanied by certificates.

4. If marketing quotas are not approved in referendum, there would be:
 - a. no penalties for planting in excess of allotments;
 - b. no wheat marketing certificates;
 - c. no diversion payments; and
 - d. price support through nonrecourse loans or direct purchases at no less than 50 percent of parity to producers who plant within their allotments. The Secretary could also authorize loans at not more than 50 percent of parity to producers planting in excess of their allotments.

5. If marketing quotas are not announced, permanent legislation provides for:
 - a. no mandatory restrictions on marketings and no penalties for planting in excess of allotments;
 - b. no wheat marketing certificates;
 - c. no diversion payments;
 - d. price support through CCC loans or direct purchases at 75 to 90 percent of parity to producers who plant within their allotments; and
 - e. operation of a farmer-owned reserve for producers who plant within their allotments.

It was assumed for this study that the Secretary would conclude at the start of the 1986 marketing year and in subsequent years that the supply of wheat (carryover plus expected production) in the coming year would be excessive. Having so determined, the Secretary would announce a small enough national acreage allotment to prevent the buildup of excessive CCC stocks and a marketing quota designed to improve returns to producers planting within their allotments. It was further assumed that a Secretary, mindful of high program costs, would set the loan rate for wheat accompanied by domestic food certificates at the minimum 65 percent of parity. The Secretary was also assumed to set the loan rate for wheat for other domestic uses and wheat for export low enough to make wheat competitive domestically as a feed grain and internationally in the export market.

Given these loan rate assumptions, more than one-third of the wheat producers would be likely to vote against a marketing quota and prevent its implementation. Producer returns would be higher and risk lower with the loan rate set at 50 percent of parity for all wheat produced on allotment acreage than with support at 65 percent of parity for domestic food wheat and essentially at the open market price for the remainder of the crop. Moreover, the geographic distribution of the wheat allotments using the 1977 base (the last complete listing of individual farm acreages on record) for apportionment could also work against referendum approval. Farmers in the Southeast who currently produce 8 to 10 percent of the wheat crop would be apportioned less than 3 percent of a national acreage allotment. Most of these producers would likely vote against any referendum that restricted them to planting a small fraction of the wheat they have grown accustomed to planting in their wheat-soybean operations. The producers in question account for more than one-third of eligible voters.

The wheat projections used in this study assume that producers would vote against marketing quotas and that farmers who planted within the allotment announced by the Secretary would be eligible for loans at 50 percent of parity for all they produced--\$3.89, \$4.08, \$4.26, \$4.45, and \$4.65 per bushel, respectively, for the 1986 through 1990 wheat marketing years.

Upland Cotton: The upland cotton program under permanent legislation would be similar to the wheat program. Authority for target prices and deficiency payments would expire but authority for nonrecourse loan and direct purchase programs would continue. The Secretary would be required to announce a national cotton acreage allotment, but set at no less than 16 million acres. The Secretary could also announce a cotton marketing quota subject to approval by two-thirds of producers. Price support levels would be set at 65 to 90 percent of parity if quotas were approved or at 50 percent of parity if not approved. The level of support would be set between 65 and 90 percent of parity if the Secretary, after reviewing the supply-demand situation for the coming year, decided not to announce marketing quotas.

The cotton program would operate as follows:

1. The Secretary announces a national acreage allotment for cotton of not less than 16 million acres and announces whether or not a marketing quota will be in effect for the coming year by no later than October 15--for example, by October 15, 1985, for the 1986 crop.
 - a. A quota is announced if the Secretary determines that, in the absence of quotas, supply would exceed "normal" levels. Normal supply is defined as domestic consumption plus exports for the coming year plus a 30-percent carryover.
 - b. A national cotton acreage allotment apportioned into allotments for individual farms must be announced regardless of whether a quota is announced.
2. If marketing quotas are announced, a national referendum of cotton producers must be held by no later than December 15 of the year prior to the marketing year in which quotas will apply--for example, by December 15, 1985, for the 1986 crop.
3. If a marketing quota is approved by two-thirds or more the cotton producers voting in a referendum, permanent legislation provides for:
 - a. a mandatory cotton marketing quota and acreage allotment;
 - b. no diversion payments;
 - c. price support to producers who comply with the allotment through loans or direct purchases at no less than 65 percent nor more than 90 percent of parity; and
 - d. penalties equal to 50 percent of parity on production over and above the allotment.
4. If marketing quotas are not approved, permanent legislation provides for:
 - a. no marketing quotas and no penalties on plantings in excess of allotments;

- b. no diversion payments; and
 - c. price support at 50 percent of parity through nonrecourse loans or direct purchases from producers who comply with their allotments.
5. If marketing quotas are not announced, permanent legislation provides for:
- a. no mandatory restrictions on marketings and no penalties on excess production;
 - b. no diversion payments; and
 - c. price support to farmers planting within their allotments at 65 to 90 percent of parity as determined by the Secretary. Farmers planting in excess of their allotments are to receive support not in excess of the levels provided program compliers. The Secretary can require compliance with allotments as a condition for eligibility for price support.
6. There is no authority to sell, lease, or transfer cotton allotments.

It was assumed in this study that the Secretary would decide at the beginning of the 1986 marketing year and in subsequent years that cotton supplies were likely to exceed normal levels in the upcoming year. The Secretary would consequently announce the minimum 16-million-acre allotment as well as marketing quotas. While some of the geographic factors at work in wheat would also work against producer approval of cotton quotas, the higher loan rate in place with a marketing quota would be applicable to all, rather than only part, of the cotton produced on allotment acreage. This would probably convince producers to approve marketing quotas.

Assuming referendum approval, marketings would be legally restricted and plantings could not exceed 16 million acres. Loan rates would be set at the minimum of 65 percent of parity or at \$0.90, \$0.94, \$1.01, \$1.09, and \$1.17 per pound for the 1986 through 1990 cotton marketing years.

Extra-Long Staple Cotton: The provisions of the Extra Long Staple Cotton Act of 1983 would remain in effect with the expiration of the 1981 Act if no new legislation were enacted. The law provides for extra-long staple loan rates set at 150 percent of the upland cotton loan rate and extra-long staple target prices set at 120 percent of the extra-long staple loan rate. Loan rates by 1990 could exceed \$1.70 per pound with target prices above \$2 per pound.

The law does provide, however, for the continuation of voluntary acreage reduction programs at the discretion of the Secretary. Eligibility for program benefits would be tied to compliance. It is assumed here that the Secretary would use acreage reduction programs to keep extra-long staple supplies in balance with effective market demand, making it unnecessary for the CCC to acquire large stocks.

Feed Grains: Little of the current feed grain program, other than nonrecourse loans and authority for direct purchases, would continue with a reversion to permanent legislation. Authority for target prices and deficiency payments would cease along with authority for acreage programs. Section 330 of the Agricultural Adjustment Act of 1938, as amended, provides that acreage allotments not be established for the 1959 and subsequent corn crops. No acreage allotments have ever been authorized for barley, oats, sorghum, or rye.

Under permanent legislation, corn prices would be supported through nonrecourse loans or direct purchases at not less than 50 percent or more than 90 percent of parity. Support levels would be set within this range by the Secretary so as to prevent the accumulation of excess CCC stocks. The other feed grains would be supported according to their feed value relative to corn.

For purposes of this study, it was assumed that the Secretary would set corn loans at 50 percent of parity or \$2.91, \$3.00, \$3.17, \$3.37, and \$3.56 per bushel for the 1986 through 1990 corn marketing years. Sorghum, oats, and barley loan rates would be set at 95 percent, 51 percent, and 81 percent, respectively, of the corn loan rate.

Peanuts: The peanut program under permanent legislation would not differ substantially from the current program. The 1986 program would begin with the Secretary's announcement of a national marketing quota of not less than 1.61 million acres times normal yield. If two-thirds of producers approved the quota in a referendum, it would be effective for the 3 following marketing years. The permanent peanut support program also provides for penalties for farmers marketing peanuts in excess of their quota and for farmers marketing peanuts from any farm without an allotment. If the quota was approved, price supports would be set between 75 and 90 percent of parity. If the referendum was not approved, support would be set at 50 percent of parity and all farmers would be eligible for loans or direct purchases. It was assumed here that the quota was approved and loan rates for peanuts would be set at 50 percent of parity or 39.3 cents, 40.8 cents, 42.2 cents, 44.1 cents, and 45.8 cents per pound for the 1986 through 1990 peanut crops.

Dairy: A reversion to permanent legislation would leave the structure of the dairy program unchanged, but would increase support prices significantly. The support price for milk would be set between 75 and 90 percent of parity at the discretion of the Secretary. It was assumed that the Secretary would set support at 75 percent of parity or the equivalent of \$17.65, \$19.16, \$20.57, \$22.18, and \$24.17 per hundredweight for manufacturing milk for the 1986 through 1990 marketing years. These higher dairy support provisions would become effective October 1, 1985.

Tobacco: Contrary to the other major commodities, tobacco's current support program was passed by Congress as a revision of the permanent support statute. Hence, the program would continue unchanged with the expiration of the 1981 Act. The program currently provides for a marketing quota of 647 million pounds for burley tobacco with a national average loan level of \$1.75 per pound. For flue-cured tobacco, the marketing quota is set at 887 million pounds with a national average loan level of \$1.70 per pound. The program also provides for a flue-cured acreage allotment of 457,516 acres.

It was assumed for this study that the acreage allotment and quotas would continue at these levels through 1990. It was also assumed that import restrictions under Section 22 of the Agricultural Adjustment Act would be used to minimize the stockholding by the CCC and cooperatives necessary to support tobacco prices at parity-linked levels.

Discretionary Commodity Programs

Permanent legislation also includes provision for Secretarial discretion in deciding whether or not to operate price and income support programs for soybeans, sugar, rice, and wool and mohair. The assumption made for these commodities are summarized below.

Soybeans: The Secretary of Agriculture has had discretionary authority to implement a loan and purchase program for soybeans since 1949 but has generally not been required to do so. If the 1981 Act expires, the Secretary would continue to have discretionary authority to operate a loan and purchase program under Section 301 of the 1949 Act. It is assumed for this study that the Secretary would implement a soybean price support program comparable to the minimum support programs mandated for the other basic commodities. This would involve offering producers a loan program with support levels set at 50 percent of parity. Loan rates would be set at \$7.18, \$7.41, \$7.64, \$7.95, and \$8.27 per bushel for the 1986 through 1990 crop years. Given the strong relationship between corn and soybean prices, the increase in soybean prices likely as a result of the Secretary's decision to opt for price supports would be minimal. Government costs could prove significant, however, with the CCC rather than the private sector bearing the cost of most soybean stockholding.

Sugar: The Secretary also has discretionary authority under Section 301 of the 1949 Act to operate a support program for beet and cane sugar at levels not in excess of 90 percent of parity. It was assumed for this study that the Secretary would continue the current program to protect domestic producers from low and highly variable world market prices. The Secretary was assumed to set support levels at 50 percent of parity but to use import restrictions to rule out any large-scale CCC support activity. The sugar loan rates would be 25.6 cents, 26.4 cents, 27.2 cents, 28.4 cents, and 29.5 cents per pound for the 1986 through 1990 marketing years.

Rice: Specific authority for the Secretary to operate target price and deficiency payment programs for rice would expire with a reversion to permanent legislation. Section 601 of the Agriculture and Food Act of 1981 repealed those provisions of permanent legislation relating to acreage allotments and marketing quotas for rice. As a result, no price support or production control programs would be authorized. It is unclear, however, whether the Secretary would be required to operate a rice program under the general authority provided for in Section 101 of the Agricultural Act of 1949 or under the CCC Charter Act.

It was assumed here that, since rice has traditionally been treated as a program commodity, the Secretary would decide in favor of a support program comparable to the feed grain program. Loan rates would be set at 50 percent of parity or \$11.05, \$11.60, \$12.11, \$12.65, and \$13.20 per hundredweight for the 1986 through 1990 rice marketing years.

Wool and Mohair: After December 31, 1985, the Secretary would have discretionary authority under Section 301 of the 1949 Act to support the price of wool and mohair at not more than 90 percent of parity. There is no statutory authority for payments to be made directly to producers. In keeping with the assumptions made for the other commodities with discretionary programs, it was assumed here that wool and mohair would be supported through nonrecourse loan programs at 50 percent of parity. Loan rates would be set at \$2.44, \$2.54, \$2.66, \$2.78, and \$2.92 per pound for wool produced from 1986 through 1990. Mohair loan rates would be set at \$7.72, \$8.06, \$8.41, \$8.80, and \$9.24 for the 1986 through 1990 marketing years.

Honey: The permanent support program for honey was originally authorized in the Agricultural Act of 1949. The Secretary is required to support honey prices at between 60 and 90 percent of parity. It is assumed here that honey would be supported at 60 percent of parity through 1990 using nonrecourse loan programs rather than direct purchases. The loan rate for honey would be set

at 70.8 cents, 72.6 cents, 74.4 cents, 77.4 cents, and 80.4 cents per pound, respectively, for the 1986 through 1990 marketing years.

Payment Limitations and Grain Reserves

The Agriculture and Food Act of 1981 sets a limit of \$50,000 on the total payment any producer can receive annually under the 1982-85 wheat, feed grain, cotton, and rice programs. There would be no such limitation under permanent legislation, although elimination of deficiency payments (except for extra-long staple cotton) and the channeling of support through nonrecourse loans would tend to keep direct payments relatively small.

The authority to operate a grain reserve would continue under the provisions of Section 110 of the 1949 Act. The continued operation of a reserve is an important assumption in this study since much of the increase in production generated by permanent legislation's higher prices would ultimately accumulate as Government stocks.

Other Programs

Several other programs, including the food aid, export credit, and food stamp programs, would be affected by a reversion to permanent legislation. While these programs are not normally considered part of the price and income support system, they were treated in this report because of their impact on demand for farm products here and abroad and in turn on producer prices and incomes. CCC minimum sales price and cottonseed-soybean support provisions would also be affected by a reversion to permanent legislation. The specific assumptions made in these areas are summarized below.

The Food Aid Program: No new agreements under Title I or assistance programs under Title II of P.L. 480 could be negotiated after December 1985. It was assumed for this study, however, that P.L. 480 would be continued through special legislation with funding at the recent \$1.5- to \$1.7-billion level.

Export Credit Programs: The export credit programs originally authorized under the CCC Charter Act would continue with a reversion to permanent legislation, but with their funding levels undetermined. It was assumed for this study that the United States would fund \$4.5 to \$5 billion in export credits per year through 1990, but with the bulk--possibly 95 percent--of the activity concentrated in credit guarantees rather than direct credit. This would represent a drop of \$1 to \$2 billion in real terms from the 1983-84 level but would be in line with longer term credit levels.

The Food Stamp Program: Funding for the food stamp program would expire if no new legislation were passed by September 30, 1985. It is assumed in this study that funding through 1990 would continue at the \$11- to \$12-billion level.

CCC Minimum Resale Prices: Effective for the 1986 crop year, the CCC minimum resale price for wheat, feed grains, and other program commodities would be 115 percent of the support rate plus reasonable carrying charges. If a wheat marketing quota is in effect, the support rate is defined as the loan rate for wheat accompanied by domestic marketing certificates. If a grain reserve program is in effect, the resale minimum for wheat and feed grains would be 110 percent of the loan rate.

Cottonseed-Soybean Support Price Relationship: Permanent legislation provides that if prices of either cottonseed or soybeans were supported, the Secretary would be required to support the price of the other to allow them to compete on equal terms in the market. Since it is assumed that a soybean program would be in effect, it was also assumed that a cottonseed program would be implemented. Supporting cottonseed prices at 50 percent of parity would require loans or direct purchases at 6.5 cents, 6.7 cents, 6.8 cents, 7.1 cents, and 7.4 cents per pound for the 1986 through 1990 marketing years.

Program Provisions and Assumptions with Supports Eliminated

The program provisions assumed to be in effect under the no-support scenario are far simpler than provisions under the permanent legislation scenario. All price and income support is assumed to cease with the end of the 1985 marketing year. No loan or direct purchase programs would be in effect for 1986 crops or for milk produced after October 1, 1985. No deficiency payments would be made and no acreage or other supply control programs would be in effect. The decision to operate with no supports was assumed to have been reached early enough in 1985 to allow producers to plan 1986 operations fully aware that open-market forces would determine commodity prices and producer returns.

A number of assumptions had to be made, however, as to how the Government would withdraw from the market so as to ease such a transition. The assumptions made regarding management of the CCC and farmer-owned reserves (FOR) on hand at the end of the 1985 marketing year were critical. It was assumed that USDA would buy out the farmer-owned reserve at the end of the 1985 marketing year and that these stocks, combined with CCC holdings, would be isolated in a special transition reserve. This transition reserve would be drawn down only if open-market prices rose 10 percent above the moving average market price for the previous 5 years. Given the relatively small amount of commercially held stocks left on the market for many of the major program commodities, this assumption would lend strength to producer prices early in the transition while protecting consumers from fluctuations in prices and supplies until the private sector adjusted to its expanded stockholding role.

Given the normal weather conditions assumed in this study, much of the stocks (with the exception of dairy products disposed of largely through assistance programs) isolated in this special reserve would remain in the reserve beyond 1990.

THE 1986-90 MARKET SETTING

The impacts of reverting to permanent legislation or operating with no price and income support programs in 1985 are often described as if clear cut. Their effect on the farm sector and the general economy could vary widely, however, depending on the market setting over the remainder of the 1980's. A market characterized by strong growth in demand relative to supply, for example, could generate high enough prices and incomes to narrow differences between the permanent legislation and no-support scenarios. Conversely, however, a market setting characterized by stronger growth in supply than demand would work to widen differences between scenarios in all the variables highlighted in this study.

This section summarizes the assumptions made regarding the market setting likely for the rest of the decade and the macroeconomic, resource and productivity, input, and trade factors shaping it. In general, the

assumptions suggest that the 1986-90 period will be one of continued strong growth in agriculture's capacity to produce, slow growth in domestic demand for farm products, and stiff competition abroad for export markets. In this setting, market-determined farm prices and incomes would normally fall over time until enough resources had moved out of agriculture to bring the sector's capacity to produce and demand for its products back into closer balance.

The 1986-90 outlook is uncertain enough and the market volatile enough, however, that normal year-to-year swings in supply or demand could temporarily reverse this situation. As a result, the 1986-90 market environment is probably best described as uncertain but tending toward excess supplies and weakening returns that would increase rather than decrease differences between the two scenarios.

The Economic Setting

The U.S. Macroeconomic Outlook

Concern with maintaining noninflationary growth in the face of large-scale Federal deficits is likely to continue to dominate the U.S. macroeconomic outlook for the rest of the 1980's. This study assumes that the Federal Reserve Board expands the money supply fast enough to prevent a recession but slowly enough to prevent an inflationary surge. Fiscal policy would remain expansionary, but monetary policy would fluctuate somewhat, tightening when inflation accelerated and expanding when recession threatened.

Table 2 summarizes the outlook for the major macroeconomic indicators likely in this tight-rope environment. In general, the economy is assumed to perform better than during the 1970's but not as well as during the 1960's. The economy follows a dampened 3- to 5-year business cycle with no major booms or busts. Economic recovery, strong in 1984, would slow in 1985 and bottom out in 1986 before recovering again in 1987 through 1989. Real growth for the rest of the decade as a whole is projected to average 2.5 percent, 0.5 percentage point above growth in the 1970's, but 1.5 percentage points below growth in the 1960's.

Even with growth averaging 2.5 percent per year, economic activity at the end of the decade would still lag below longrun trend levels. Labor and product markets, for example, would continue to operate below full capacity, with unemployment averaging 7 percent. Growth in the money supply is assumed to average 8 percent, down from the 10-percent rate of the 1970's, but almost twice the pace of the 1960's. Inflation is assumed to average 5 percent, down from 7 percent in the 1970's, but up from 4 percent in the 1960's. Real interest rates would continue to be relatively high by historical standards. The prime rate, for example, is assumed to remain near 12 percent, down slightly from the 1970's but up from the 6-percent average of the 1960's.

The International Macroeconomic and Financial Outlook

The macroeconomic outlook abroad is assumed to follow the general recovery pattern projected for the United States after provision is made for finance and trade-linked leads and lags of 2 to 8 quarters. Foreign economic activity is projected to accelerate compared with the 1970's but continue below the pace of the 1960's. Real growth could average 2.5 to 3 percent per year, compared with less than 1 percent since 1979, as recovery in the United States and several other developed countries spreads through trade and finance linkages to the rest of the world. However, protectionist trade policies and lingering debt

problems in many middle income countries are likely to keep the recovery weak compared to past upturns and hold activity in most of the world below longrun trend levels.

In this global economic setting, the value of the U.S. dollar is likely to continue high by historical standards, although somewhat below the record set in 1984. While short-term fluctuations in the value of the dollar in response to movements in U.S. interest rates are likely, the value of the dollar is unlikely to weaken significantly without a different mix of U.S. monetary and fiscal policies. Even with a large and growing trade deficit, the dollar is unlikely to depreciate more than 15 to 30 percent over the rest of the decade without significantly lower interest rates. Given the 50-percent appreciation experienced since 1981, this would still leave the value of the dollar high enough to encourage capital inflows and growth in imports while discouraging exports.

Table 2--Projected U.S. macroeconomic indicators and historical comparisons ^{1/}

Item	<u>Averages</u>							
	1980	1981	1982	1983	1984	1964-73	1974-83	1985-90
	<u>Percent change</u>							
Real gross national product	-0.3	2.5	-2.1	3.7	7.5	4.2	2.1	2.5
Real disposable income per capita	-.6	1.5	-.3	2.5	5.7	3.6	1.4	1.5
GNP deflator	9.2	9.6	6.0	3.8	3.7	4.0	7.4	5.6
Population	1.2	1.2	1.2	1.0	1.2	1.1	1.1	1.0
Money supply	1.2	1.2	1.2	1.0	7.6	8.2	9.8	8.0
	<u>Percent</u>							
Unemployment rate	7.1	7.6	9.7	9.6	7.3	4.6	7.5	7.2
Prime interest rate	15.3	18.9	14.5	10.8	12.4	6.2	11.4	12.3
	<u>Billion dollars</u>							
Federal deficit	61	64	148	179	164	7	68	208
	<u>Percent change</u>							
Foreign gross domestic product	3.2	6.0	2.5	2.6	2.7	1.3	.8	1.0
Foreign exchange value of the U.S. dollar	0	14	17	10	11	-2	4	-1

^{1/} Projections based on a consensus of projections by Chase Econometrics, Wharton Econometric Forecasting Associates, and Data Resources Incorporated as of mid-1984. They are not official U.S. Government projections.

Farm Sector Resource and Productivity Assumptions

Given the very different roles the Government would play in managing commodity supply under the two scenarios, the assumptions made regarding growth in the sector's capacity to produce are critical. The resource and productivity assumptions made in this study and highlighted below suggest that growth in agriculture's capacity to produce at constant or even declining real prices could outdistance growth in demand. If such an excess supply situation materialized, the difference between scenarios would be clear cut. Market forces would work under the no-support scenario to move resources out of agriculture to balance growth in supply and demand, while permanent legislation's support programs would work to maintain, and possibly expand, the resources committed to agriculture.

Agriculture's Natural Resource Base

This study assumes that agriculture's natural resource base will continue to expand slowly, possibly at 0.3 percent per year, over the remainder of the 1980's. Changes in product or input prices might accelerate or slow this growth, but past farmer behavior suggests that the change would be small without a dramatic deviation from the postwar trend of slowly declining real product and input prices.

Much of this growth in the resources committed to agriculture is likely to be concentrated in expanding the acreage cropped and in raising cropland productivity. As much as 35 million acres could be added to the cropland base by 1990 with relatively little investment in development. Soil Conservation Service surveys done in 1977 and 1982 identified 25 to 35 million acres of medium- and high-potential land currently not being cultivated but well suited for regular cropping. Conversion of even half of the high-quality acreage currently used as pasture to cropping could add another 10 to 15 million acres to the base.

Continued investment in doublecropping and irrigation would also expand the sector's production base by raising cropland productivity. While the acreage involved would be small, with land in the two categories increasing possibly 10 to 15 million acres by 1990, increases in these categories would have a marked impact on production potential because of the substantially higher yields involved.

These factors in combination indicate that agriculture's land base could expand to 480 to 490 million acres by the end of the decade with trend product and input prices (table 3). Of this total, 400 to 410 million acres would likely be cropped in the absence of acreage reduction programs or a sharp drop-off in producer returns. This compares with a record cropped area of 390 million acres in 1981 and with 334 million acres in 1983 when large-scale Government programs idled more than 60 million acres. Given the fixed-cost nature of most producers' land expenses, sharply lower returns would be necessary to generate any significant drop in the cropland base. Conversely, a sustained upturn in returns could expand the base, possibly to 520 million acres with 430 to 440 million acres available for cropping.

Productivity Growth in Agriculture

Although increased acreage has played a major role in expanding farm output since 1972, most of the production gains realized during the past 30 years were the result of productivity growth linked to increased mechanization and

Table 3--U.S. cropland base, 1969-83 and 1990 projected

Cropland use	: 1969	: 1972	: 1974	: 1976	: 1978	: 1979	: 1980	: 1981	: 1982	: 1983	: 1990
	:	:	:	:	:	:	:	:	:	:	:
	:	<u>Million acres</u>									
Crops harvested	: 290	294	328	337	337	349	352	366	365	303	--
Double cropped	: 4	5	6	7	7	9	10	14	14	10	--
	:	:	:	:	:	:	:	:	:	:	:
Cropland harvested	: 286	289	322	330	330	340	342	353	351	293	--
Crop failure	: 6	7	8	8	7	7	11	6	7	6	--
Summer fallow	: 41	38	31	31	32	32	31	31	30	35	--
	:	:	:	:	:	:	:	:	:	:	:
Used for crops	: 333	334	361	369	369	379	384	390	388	334	--
	:	:	:	:	:	:	:	:	:	:	:
Idle cropland	: 51	--	21	--	26	--	--	--	--	65	--
Total cropland	:	:	:	:	:	:	:	:	:	:	:
excluding pasture	: 384	--	382	--	395	--	--	--	--	395	400-410
	:	:	:	:	:	:	:	:	:	:	:
Cropland used for	:	:	:	:	:	:	:	:	:	:	:
pasture	: 88	--	83	--	76	--	--	--	--	75	--
	:	:	:	:	:	:	:	:	:	:	:
Total cropland	: 472	--	465	--	471	--	--	--	--	470	480-490

-- = Not available.

Source: Agricultural Statistics, U.S. Department of Agriculture, various issues from 1964 through 1983.

greater use of purchased inputs (table 4). It is assumed here that this productivity growth trend will continue with gains averaging 1.5 to 2 percent per year through 1990. This growth is assumed to take place as a result of expanded use of higher yielding crop varieties, more efficient use of fertilizer and pesticides, and gains in feeding technology and animal husbandry. The backlog of crop and livestock technology awaiting adoption, combined with growing farmer interest in adopting the latest technology available to increase output and control costs, tends to support this assumption.

A sector-wide 1.5- to 2-percent productivity growth rate would translate into widely differing rates of gain across commodities and between the crop and livestock sectors. Productivity growth in the crop sector, for example, is likely to increase faster than in the livestock sector--particularly if compared with productivity growth in nondairy livestock operations. Rates within the crop sector are also likely to vary widely. Given historical relationships, a 1.5-percent sector-wide productivity growth rate would translate into corn yield gains of 2 percent per year (2 bushels per acre). Growth rates for wheat, soybeans, and cotton would be somewhat lower at 1.25

Table 4--Agricultural productivity growth rates and characteristics

Year	Productivity index 1977 = 100	Growth rates and characteristics
1959	74	<u>Compound annual growth, percent</u>
1960	77	1959-82 = 1.6
1961	78	1959-70 = 1.5
1962	79	1971-82 = 2.0
1963	82	
1964	82	<u>Standard error</u>
1965	86	
1966	83	1959-82 = 2.85
1967	86	1959-70 = 1.95
1968	87	1971-82 = 3.85
1969	88	
1970	87	<u>Coefficient of variation, percent</u>
1971	94	
1972	94	1959-82 = 3.15
1973	95	1959-70 = 2.35
1974	90	1971-82 = 3.85
1975	99	
1976	98	<u>1990 trend values (1977 = 100)</u>
1977	100	
1978	102	1959-82 trend = 124
1979	106	1959-70 trend = 122
1980	101	1971-82 trend = 128
1981	115	
1982	116	
1990	122-28	

Source: Economic Indicators of the Farm Sector, Productivity and Efficiency Statistics, 1982, ECIFS 2-5, Economic Research Service, U.S. Department of Agriculture, Feb. 1984.

percent, 0.75 percent, and 0.9 percent per year, respectively, generating yield increases of 0.4 bushel, 0.2 bushel, and 5 pounds per acre, respectively.

Trend gains in livestock productivity have been and are assumed to continue to be slower than crop gains. Livestock productivity gains have typically related to improvements in animal husbandry as well as improvements in the production and use of feed and fodder. These factors in combination worked to raise feed conversion rates more than 100 percent over the last three decades. Biogenetic technologies have also been at work more recently to improve feed conversion but also to promote developments such as twinning in beef cattle and larger litter size in hogs. This study assumes that trend growth in livestock productivity of 1.0 to 1.25 percent per year will continue through 1990. The study also assumes, however, that increases in dairy productivity will continue to outdistance gains elsewhere in the livestock sector and match or exceed productivity growth in the crop sector.

Any significant improvement in producer returns could raise these trend productivity growth rates significantly. The experience of the 1970's suggests more favorable returns could increase productivity growth to 2 to 2.5 percent per year. Conversely, a sharp drop in returns could lower productivity growth, although not to the same extent as likely with stronger returns. Weaker returns could work at least initially to encourage producers to adopt new technology, particularly cost-saving technology, faster. But with significantly lower returns over any long period of time, changes in input use would slow growth in productivity as much as one-half percentage point per year.

This assumption of trend growth in productivity depends on continued input supplies and prices as well as producer prices. Given current and planned industry capacity, input supplies are assumed here to be large enough and price favorable enough to support continued, albeit possibly slower, growth in input use.

Given the experience of the last decade, changes in the mix of inputs used could prove as important as changes in the volume of inputs used. Adoption of improved farm resource management practices, such as conservation tillage, has enabled farmers to substitute agrichemicals for labor, fuel, and machinery to hold down input costs while maintaining productivity levels. Changes in product prices of the magnitude likely under either scenario could generate further shifts in input mixes. Adjustments under the no-support scenario could be particularly marked as farmers worked to lower operating costs while maintaining productivity and output.

It is important to note, however, that a changing input mix does not necessarily mean significantly slower growth in agricultural productivity. The experience with changing input mixes since the mid- and late-1970's, while admittedly not readily transferable, has actually been one of accelerating growth in total productivity.

For further information on prospects in this productivity area in particular, see the recent USDA publication, Agriculture in the Future: An Outlook for the 1980's and Beyond, AIB-484.

World Market and U.S. Trade Assumptions

Growth in the World Market

While reverting to permanent legislation or operating without farm price and income supports in the United States would affect the day-to-day operation of the world market, neither decision is likely to change the basic market environment significantly. It was assumed here that this basic market environment over the remainder of the 1980's would be one of slow recovery from the stagnation in demand and trade experienced since 1981. The support programs in place would work against this backdrop first and foremost to strengthen or weaken the U.S. competitive position in the market and only secondarily to speedup or slow the pace of recovery.

This recovery assumption is based on expectations that population growth and the return to upgrading diets in middle income countries that is likely with stronger economic activity will boost lagging growth in world demand for farm products. Much of this stronger growth in demand for farm products, however, is likely to be met by increases in local production or left unmet as financial constraints rule out large-scale importing to augment local production.

Investments made in many countries to expand food production during the mid-1970's are reaching maturity and accelerating growth in agricultural production. Slowed growth in demand since 1981, combined with trend growth in production, has also put many importing countries in a stronger position to meet their food needs locally and to reduce dependence on imports. Moreover, some countries with the fastest growing import demand will have to limit or rule out purchases abroad until their foreign exchange and debt positions improve.

These factors in combination are likely to keep the recovery in trade likely over the next 4 to 5 years slower than past rebounds. Growth in world agricultural import demand of 4 to 5 percent per year--roughly two-thirds the pace of the 1970's--is compatible with this view of the market. It is important to note, however, that the expansion in trade likely over the next decade would still be large. For example, trade in grains and oilseeds during the 1970's increased 130 million tons. Grain and oilseed trade expanding at the lower rate assumed here, but from the higher base of the early 1980's, would increase 70 to 90 million tons by 1990.

Competition for markets in this financial and trade environment is likely to intensify. Competition among exporters hoping to expand their share of the world market in order to compensate for slower growth in world import demand (and possibly in their own domestic markets as well) is likely to strengthen. Importing countries are also likely to become increasingly sensitive to differences in prices between alternative suppliers and to search out the best buys.

Growth in U.S. Exports

U.S. farm exports have traditionally grown more slowly than world trade during periods of slow growth in world import demand and intensified competition for market share. Aggressive marketing by the other exporters has generally worked to make the United States even more of a residual supplier than in periods of balanced or short supply. Past U.S. performance in gaining and holding market share in a slow-growth market setting suggests that U.S.