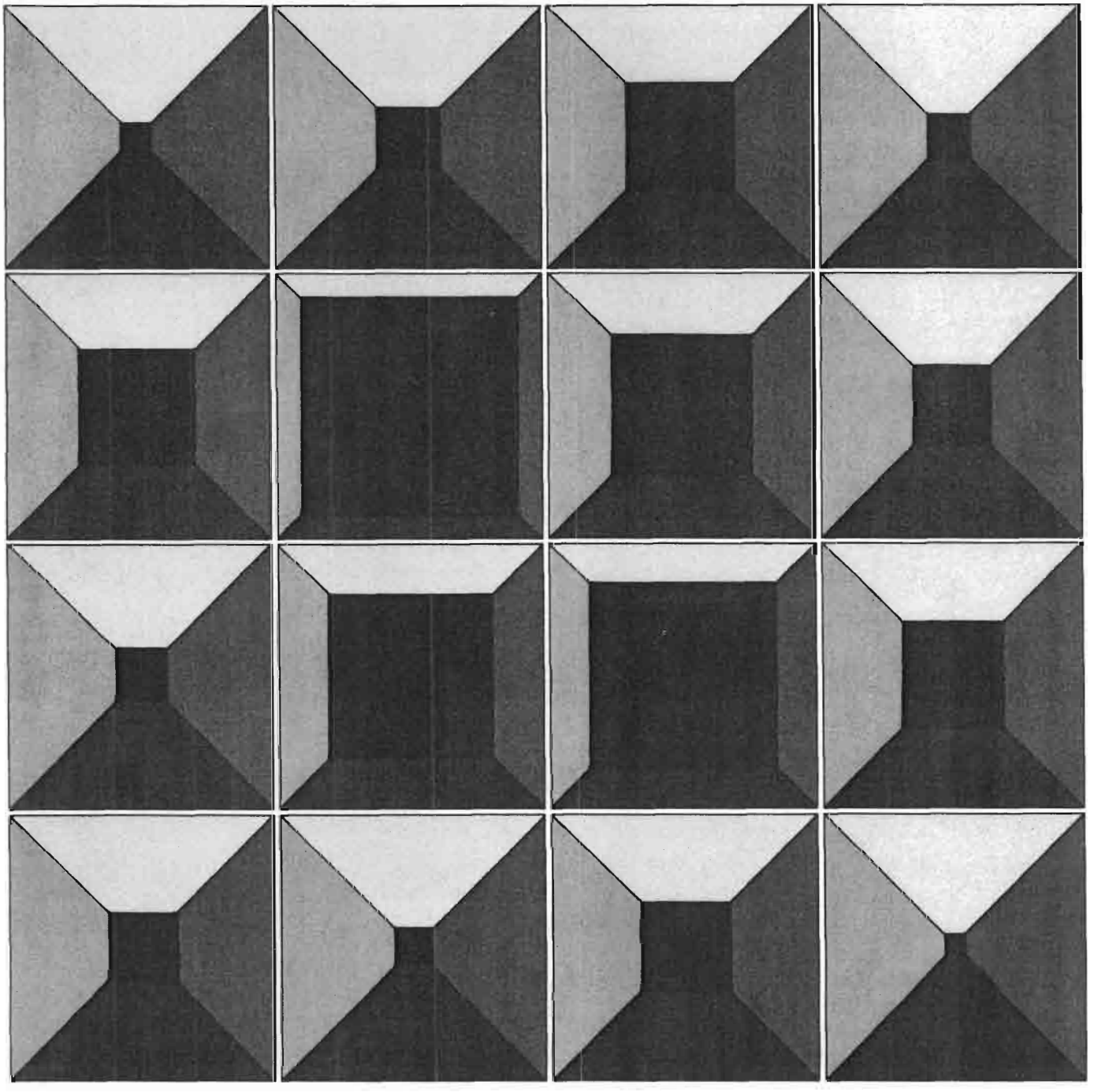
A CBO STUDY

Crop Price-Support Programs: Policy Options for Contemporary Agriculture

February 1984

Congress of the United States
Congressional Budget Office



CROP PRICE-SUPPORT PROGRAMS:

POLICY OPTIONS FOR CONTEMPORARY AGRICULTURE

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PREFACE

Public policies toward farming have changed little in half a century. As a result, they impose a substantial burden on taxpayers, and are often ineffective in raising farm income or moderating the sharp year-to-year fluctuations in farm prices and incomes. Moreover, the policy objectives are often in conflict. Underlying these difficulties is the fact that the agricultural sector has changed profoundly since the programs began.

In 1985, the Congress will enact new farm program legislation to replace the expiring Agriculture and Food Act of 1981. This paper, requested by the Joint Economic Committee, is intended to assist the Congress in examining alternative public policies. In keeping with the Congressional Budget Office's mandate to provide an objective and nonpartisan analysis of issues before the Congress, no recommendations are offered.

James G. Vertrees and Andrew S. Morton of CBO's Natural Resources and Commerce Division prepared the report under the supervision of David L. Bodde and Everett M. Ehrlich. Howard Conley of the Natural and Physical Resources Cost Estimates Unit provided budget estimates and helpful comments and suggestions. Francis Pierce edited the report. Kathryn Quattrone and Philip Willis typed the several drafts and prepared the manuscript for publication.

Rudolph G. Penner
Director

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SUMMARY

While agriculture has changed dramatically over the past 50 years, farm programs have not. Consequently, programs to assist crop farmers have become less effective in achieving their two major goals--to increase or to stabilize farm prices and incomes--while their costs have risen sharply. This study focuses on the price-support programs for the major crops--wheat, feed grains, rice, upland cotton, and soybeans.

Today, most farm products are produced on a relatively small number of large commercial farms. Families operating these farms have average incomes well above average nonfarm family income. In contrast, the majority of farm families provide just a small part of farm output; they draw the largest share of their incomes not from farming but from nonfarm sources. Consequently, the rationale for using farm programs to raise farm incomes needs to be reexamined.

At the same time, the greater dependence of farmers on more volatile export markets has made them highly vulnerable to uncertain prices and incomes. A farm policy consistent with commercial farming today would therefore put emphasis on stabilizing prices and incomes. If, on the other hand, the Congress wants to raise the income of farm families, such assistance could be better targeted than it is under current policy, which ties benefits to crop production. This study examines alternative stabilization and income-enhancement policies for the agricultural sector.

CHANGES IN U.S. AGRICULTURE

The evolution of U.S. agriculture has brought three major changes:

- Farming has become far more concentrated than 50 years ago; a large share of agricultural production is carried out by a relatively small number of large, specialized, capital-intensive farms.
- Farming is now more integrated with the rest of the economy and is strongly influenced by overall economic policies; the majority of farm families depend upon off-farm sources of income.
- Farmers producing the major crops now depend more on uncertain international markets for a substantial portion of their sales,

making their prices and incomes very sensitive to worldwide changes in weather, agricultural production, and government policies.

When farm programs were started during the Great Depression, nearly 25 percent of the nation's population lived on farms and depended heavily upon farm income. Today, only 3 percent of the population live on farms. About 300,000 farms, or 12 percent of all farms, produce nearly 70 percent of farm output. Families on these farms have average incomes well above average nonfarm levels. Moreover, farm families are now more fully part of the domestic economy: they buy a large share of their inputs--principally seed, fertilizer, chemicals, and machinery--from the nonfarm sector; they borrow extensively to finance production; and they earn about 60 percent of their total income from nonfarm sources. Significantly, less than 30 percent of all farm families earn most of their income from farming.

Farmers have also become part of the international economy as agricultural markets have grown increasingly global in character. In the 1970s, U.S. agricultural exports grew at the extraordinary rate of 20 percent per year, from about $7 billion in 1970 to nearly $41 billion in 1980. Exports now take the production from about two of every five acres and provide about one-fourth of gross farm income. Correspondingly, farm prices and incomes have become highly sensitive to conditions abroad--to changes in weather and in crop production, to demographic and economic factors, and to shifting government policies. Flexible exchange rates transmit economic fluctuations among countries and can change the relative prices of U.S. and foreign farm products: the substantial appreciation of the dollar has contributed to the decline in U.S. agricultural exports in the 1980s.

CURRENT FARM PROGRAMS

While some changes have occurred in farm programs--mainly less use of mandatory controls over production and marketing--the programs are the same in principle as in the 1930s. Policy objectives also have changed little, the main objectives being twofold: to enhance farm incomes in periods of excess supply, and to stabilize farm prices and incomes. Policy has also sought reasonable and stable food prices, expanded agricultural exports, and relatively low federal outlays. However, current farm programs have been progressively less able to achieve these conflicting objectives. They have shown, over time:

- A diminished capability to increase farm income because of the decreased effectiveness of supply management activities and the greater influence of economic, trade, and foreign policies, here and abroad, on farm income.

- o A diminished capability to stabilize farm prices and incomes because of shifting international events and conditions that cause unanticipated changes in U.S. agricultural exports and in farm prices.

- o An increased potential to undercut agricultural exports by raising prices in international markets, thus discouraging overseas consumption of U.S. farm products and stimulating crop production in other exporting nations.

- o A diminished effect on food prices because of lessened influence on farm prices and because of the greater importance of nonfarm prices in determining consumers' food costs.

- o An increased cost to taxpayers--major crop program outlays in 1983 being a record $12.5 billion, and total price support outlays being $18.8 billion.

If current programs continue, they are likely to mean: price supports below expected market-clearing price levels but inflexible to changing market conditions; supply management mainly through the farmer-owned reserve and government stocks; and income support through deficiency payments with escalating target prices. Farm prices and incomes would tend to be more stable than if there were no farm programs at all, but outlays for major crop programs would average $8.4 billion yearly over 1985-1988--nearly four times larger than the 1972-1982 averages. Farm programs would have little influence on food prices, given the greater importance of nonfarm prices and wages in determining food prices. Exports of farm products would continue to be impaired by price supports and the management of supply.

ALTERNATIVE POLICY CHOICES

The aims of current farm policy are both to enhance incomes and to stabilize incomes and prices. The former has dominated in the 1980s because the government has used stabilization tools to increase prices and incomes. It has done this mainly through farmer-owned reserves and government stocks, in conjunction with unprecedented acreage reductions. But there is a basic conflict between the two major policy goals of income enhancement and income stabilization, especially within the framework of current programs. The goal of stabilization is to reduce the sharp year-to-year fluctuations in prices and income. Implicit in this is the acceptance of the average level of prices and incomes dictated by the market. The goal of income enhancement, on the other hand, is to raise farm income on the

presumption that the expected long-term trend in prices and incomes is unacceptable. To pursue both of these objectives under existing farm programs is difficult and costly to taxpayers. Moreover, since commercial farmers, on average, already enjoy relatively high incomes, untargeted income enhancement for them may be an outmoded objective. Of the two objectives, stabilization may now be more credible in view of the volatile markets facing farmers, many of whom are specialized and highly leveraged.

The Congress thus faces a basic choice between two conflicting objectives: either stabilization around average market prices or an effort to raise incomes above market levels. This study assesses different options for achieving these **stabilization** and **income-enhancement** objectives.

Stabilization Options

Market-oriented price supports are one stabilization option. Both price supports and reserve release prices would be set as a percentage of the average level of recent farm prices, and would therefore be flexible, adjusting to changing market conditions. Reserve and government stocks would be built when market prices fell to support levels, and released when prices rose to trigger levels. But the allowed price range would be wider than under current policy. As compared to current policy there would be less frequent government intervention to manage supplies and prices. The income-enhancement features of current policy would end--there would be no deficiency payments or authority to reduce acreage.

Under market-oriented price supports, markets would be the key determinant of prices and incomes. Crop prices would tend to fall below current policy levels. Prices might be more stable than under current policy--if programs were managed consistently with the stabilization objective. Consumers would not fare much differently, given the relatively low proportion of food costs accounted for by farm products. The effect on crop farmers' average income levels would be uncertain; they would lose deficiency payments but would produce more without acreage reduction. Taxpayers would save about $7 billion yearly in 1986-1988 as compared to current policy, under which target prices escalate at a much faster rate than market prices. Exports would be stimulated by lower prices, flexible price supports, and less frequent government supply management.

Farm revenue insurance, which would aim directly at stabilizing crop farmers' incomes, is another stabilization option. Farm revenue insurance is a form of income insurance for individual farmers. Revenue insurance would guarantee a farmer that revenue per acre of each crop would not fall below some proportion of expected revenues. It would do so regardless of

whether the loss of revenue was caused by low prices or low yields. Thus, it would subsume the income support and stabilization features of current farm programs. As compared to current policy, revenue insurance might provide farmers more effective protection against volatile incomes. Further, the government would intervene less frequently to manage supplies and prices, although prices would be more unstable in the absence of other farm programs. A government grain reserve could help to protect consumers against serious shortages.

The taxpayer costs of revenue insurance would probably be smaller than under current policy, since farmers would pay a portion of the costs through insurance premiums. Agricultural exports would perhaps be larger since prices would, in the absence of price supports, move to market-clearing levels, thereby stimulating foreign consumption of U.S. farm products while discouraging increased foreign production.

Income-Enhancement Options

Production controls to increase long-term average incomes would entail: price supports substantially above market-clearing prices; mandatory acreage controls and marketing quotas to keep supplies in balance with demand at those prices; and income support via supply management instead of deficiency payments. As compared to current policy, restricted output and higher prices would lead to higher average incomes, at least in the intermediate term. For the longer run the effect on income is less certain, since higher prices would reduce demand, particularly in overseas markets.

Crop farmers' higher aggregate incomes would come mainly at the expense of consumers, here and abroad. Domestically, the significant price effect would be on meat, poultry, and dairy products. But taxpayer costs of farm programs would be less than under current policy since higher prices and incomes would be maintained through production and marketing controls. Exports would be harmed by increased overseas production induced by higher U.S. prices, which would also tend to discourage foreign demand. Export subsidies to counter higher U.S. prices would impose extra costs on taxpayers.

This policy would benefit those relatively few farm families that produce most of farm output. Eventually, the benefits would be capitalized into the price of farmland and increase the wealth of landowners, many of whom are not farmers. In turn, this would make it more costly for small farmers to expand and for newcomers to enter. Production controls, as well as other production-based income-enhancement policies, benefit only those individuals and families who produce certain commodities, and in proportion to their production.

Targeted income maintenance, a major departure from current policy, would insure a minimum standard of living for farm families. Unlike production-based policies, this approach would target income assistance to those farm families who do not earn satisfactory incomes. An income-maintenance program would establish a minimum income floor for farm families who wished to participate. Transfer payments would assure that the income of families would not fall below a minimum level. A minimum income floor could be scaled by family size, location, and other factors, including the availability of other public income-assistance programs.

Targeted income maintenance, as compared to current policy and production controls, would be more effective in raising the incomes of low-income farm families. Moreover, it could mesh with a stabilization policy for commercial farmers without raising prices to consumers as does current policy, and would not hurt exports. Taxpayer costs could be high, however, depending upon the level of the income floor, the number of participants, and other program details.

CONCLUDING COMMENT

Depending upon its objectives, the Congress has several farm policy choices. To make any policy work, however, program management has to be consistent over time, and this means that the Congress and the Executive should have similar views about policy goals. The challenge to decision makers is not a lack of policy alternatives, but rather the need to agree upon objectives and to use appropriate means for achieving them.

CHAPTER I. INTRODUCTION

In 1985 the 99th Congress will enact legislation to replace the expiring Agriculture and Food Act of 1981. This is the law that authorizes the federal government's price-support programs for crops and milk. (It also authorizes P.L. 480 overseas food aid, food stamps, and agricultural research.) To help the Congress prepare for this upcoming legislative task, this study (1) assesses traditional crop price support programs in the context of U.S. agriculture in the 1980s; (2) examines the consequences of continuing current farm programs; and (3) considers some implications of alternative stabilization and income-enhancement policies.

BACKGROUND

Public policy has long acknowledged the risk and uncertainty facing farmers from natural and biological causes and from the relative insensitivity of supply and demand to price changes. Public concern for the economic welfare of farmers and the supply of food and fiber has led the federal government to play a major role in supporting and stabilizing farm prices and incomes.

The basic orientation of farm programs, which were initiated during the Great Depression under the Agricultural Adjustment Act of 1933, has changed little during the past half century. But over the same period, agriculture has been fundamentally transformed. In their conception, the farm programs (also called commodity programs and price-support programs) were directed at farmers who interacted with the rest of the economy only in limited ways. Today, the insulation of U.S. agriculture has ended, and farming is a more complex and concentrated industry integrated with the rest of the economy and with international markets as well. But while circumstances have changed, farm policy has not.

Traditional farm programs thus deserve close examination, in terms of their relevance to the needs of farmers and the nation, and in terms of their costs to taxpayers. Changes in the agricultural industry have made it increasingly difficult for farm programs to achieve their two major objectives--to increase and stabilize farm prices and incomes. Furthermore, farm programs cost a record $18.8 billion in 1983, nearly six times the 1971-1981 average level, and are projected to average about $12.1 billion annually in 1985-1988.

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Farm policy objectives have not been explicitly defined by the Congress in the past. But a number of objectives, often in conflict, have dominated legislation:

- To raise farm income in periods of overproduction or diminished demand;
- To achieve a reasonable degree of stability in farm prices and income;
- To provide an adequate and stable supply of food and fiber for U.S. consumers at reasonable prices; and
- To improve the ability of U.S. agriculture to compete in international markets.

In addition, the Congress has sought to keep down the burden of farm programs on taxpayers--an objective clearly not achieved in the 1980s despite long-term efforts to make farmers more dependent upon markets.

The price-support programs discussed in this paper are not the only federal policies influencing agriculture. Others involve taxes, credit, marketing orders, research and development, resource development, and extension. By some measures, agriculture receives more federal support relative to its importance than any other sector of the economy. 1/ These programs have encouraged growth, development, and technical innovation in farming, and have contributed to supplying consumers with relatively low-cost food. The federal government has also promoted exports of farm products through trade liberalization, export credits, food aid, overseas market development, and in recent years bilateral trade agreements with a few major importing nations.

FOCUS OF THE STUDY

This study focuses on the price-support programs for major crops--wheat, corn and other feed grains, rice, soybeans, and upland cotton. Programs also exist for other commodities, such as peanuts and tobacco, and for milk. But the price-support programs for the major crops covered in this study directly affect a preponderance of U.S. farmers. The major crops are grown on about 80 percent of U.S. cropland, and their sales provide about a

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1. See Congressional Budget Office, Federal Support of U. S. Business (January 1984).

third of gross farm income. A large proportion of domestic production is exported--about 25 percent of feed grains, 40 to 50 percent of rice, soybeans, and cotton, and 60 percent of wheat. Crop price-support outlays represent about 70 percent of total price-support outlays.

Chapter II reviews current farm programs. Chapter III highlights major developments in U.S. agriculture, particularly its economic integration, organization, and international dependence. In Chapter IV the limitations of current farm programs are analyzed. Chapter V examines alternative stabilization and income-enhancement policies. The Appendix discusses the implications of eliminating farm programs altogether.

CHAPTER II. CURRENT FARM POLICY

Under current policy the government strives to keep farm prices above support levels by managing supplies in several ways. First, it can use acreage reduction programs to prevent surplus commodities from being produced. Alternatively, it can encourage farmers to place their crops under nonrecourse loans or into the farmer-owned grain reserve. This removes excess supplies from the market that would otherwise depress prices. In 1981 and 1982 the latter method was used instead of acreage reduction to deal with mounting crop supplies. Thus the farmer-owned grain reserve and government stocks were not employed as intended--to stabilize prices--but, rather, to enhance prices and income. This resulted in the accumulation of large stocks but provided only temporary price support since the stocks could not be held off the market forever. The failure of this stabilization instrument to reduce excess supplies led to an unprecedented acreage reduction program in 1983.

CURRENT PROGRAM INSTRUMENTS

Four key instruments make up current price support programs. They are **nonrecourse loans, the farmer-owned grain reserve, deficiency payments,** and **reductions in planted acreage.**

The nonrecourse loan program and the farmer-owned grain reserve were generally intended to stabilize market prices--that is, to moderate sizable swings by building stocks when prices were low and selling them when prices were high--but not to change the average price level. In contrast to this stabilization goal, deficiency payments and reductions in planted acreage were intended to support farm income, either through transfer payments to farmers or by raising market prices.

Stabilization

Nonrecourse loans are made to farmers at a specified loan rate, or **price support,** per unit of production. Farmers may store crops and use them as collateral for 9- to 12-month government loans at the loan rate. If a farmer elects not to repay the loan plus interest, the government agrees to accept the commodity as full reimbursement. Thus, nonrecourse loans place a floor under market prices, provide a source of interim financing for

farmers, and help farmers spread their sales throughout the marketing year. Since the mid-1960s the government has attempted to set price supports below expected market-clearing prices. But it has not always been successful. Although price supports establish minimum, or floor, prices for grains, upland cotton, and soybeans, prices may fall lower if many farmers do not use nonrecourse loans. However, market prices seldom remain below price supports for an extended period.

The farmer-owned grain reserve is another instrument available to wheat and feed grain growers. Under the reserve program, a farmer contracts with the government to store grain for a three-year period and receives a nonrecourse loan and annual **storage payments.** 1/ Grain in the reserve cannot be sold, except with a financial penalty, until the market price reaches a trigger release price, at which time storage payments cease and farmers can repay loans without financial penalty. Interest is charged only for the first year.

Since its inception in 1977, the reserve has been a cornerstone of grain policy, signaling the government's attempt to manage supplies so as to keep prices within a range bounded on the bottom by the reserve loan rate and on the top by the trigger release price. When the farmer-owned reserve was initiated it was available to farmers only after their regular nonrecourse loans matured; but over time this requirement was relaxed and direct entry was permitted. 2/

The reserve was originally intended to stabilize prices for farmers and consumers--that is, to moderate large price swings but not to change the long-run price level. But in the 1980s it has been used in an attempt to enhance prices and incomes by reducing readily available market supplies. In 1981 and 1982, the government encouraged farmers to place grain into the reserve by increasing reserve loan rates above nonrecourse loan rates and by making favorable storage payments. Bumper grain crops in 1981 along with weak export demand made the reserve an attractive option, and farmers placed about 10 percent of the wheat crop and 15 percent of the corn crop in the reserve. In 1982 an unattractive (to farmers) acreage reduction program along with good weather resulted in another large grain harvest. Again farmers responded, this time placing about a fifth of the

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1. Reserve loans are nonrecourse in nature, but the government has generally extended reserve loans beyond three years rather than have farmers choose not to repay loans and give grain to the government.

2. However, for the first time in several years, direct entry will not be allowed for 1984 crops.

wheat and corn crops into the reserve. The net results were unprecedented grain stocks, market prices close to price support levels, and record price-support outlays. The experience of the 1980s demonstrates that stabilization operations (such as nonrecourse loans and the farmer-owned grain reserve) are a costly and ineffective way to keep prices artificially high in the face of constantly accumulating surpluses.

Income Support

Deficiency payments support the incomes of grain and upland cotton farmers when national average prices for a specified period fall below **target prices.** The maximum payment per unit of production is the difference between the target price and the nonrecourse loan rate. 3/ For example, in 1983 farmers who participated in the wheat program received a $0.65 payment per bushel of wheat--equal to the target price of $4.30 per bushel less the price support of $3.65 per bushel. Deficiency payments were intended to provide income support largely independent of price stabilization efforts. But escalating target prices have no doubt encouraged some farmers to increase production, adding to burdensome supplies and making it more difficult for the farmer-owned reserve and nonrecourse loans to be used strictly as stabilization instruments.

Reductions in planted acreage from predetermined base levels may also be required of grain and upland cotton farmers to qualify them for the program benefits above. Further, these farmers may be offered **land diversion payments in cash or payments in kind** for additional acreage reduction. The total amount of deficiency and cash diversion payments that a person can receive under one or more of these crop programs is $50,000.

Supply management via acreage reduction is used to reduce stocks, increase prices, and lower government costs in periods of overproduction or diminished demand. Farmers must be induced to limit acreage since their participation is voluntary. Their incentive comes from two sources: (1) eligibility for nonrecourse loans, the farmer-owned reserve, and deficiency payments; and (2) payments to compensate for income forgone by idling acreage--made in cash and in commodities in 1983.

Government efforts to reduce production through voluntary acreage reduction are impaired by slippage--the extent to which production and total acreage planted are greater than implied by acreage actually taken out

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3. A producer's total deficiency payment is the per unit payment times the normal production on eligible harvested acres.

of production. Slippage occurs for several reasons: base acreages may be too large; participating farmers idle their least productive land while increasing production on their remaining acreage; and nonparticipating farmers expand acreage in anticipation of higher prices.

In 1983 acreage reduction was used on an unprecedented scale in response to burdensome crop supplies, low prices, and record price-support outlays. The Congress legislated paid acreage diversion for 1983 crops, and in January 1983 the Administration added a payments-in-kind program. Under the initial acreage reduction program, farmers had to reduce some acreage without compensation before they could idle additional acreage in exchange for land diversion payments in cash. Under the payments-in-kind program, payments were 95 percent of normal farm yields for wheat, and 80 percent of such yields for other crops. As an alternative to diverting 10 to 30 percent of their base acreages, farmers could bid to withdraw their entire base acreage from production. Under these programs, farmers diverted 77 million acres--roughly equivalent to a third of the acreage planted to these crops in 1982.

POLICY CHANGES OVER TIME

Current crop price-support programs are the product of a gradual change to a market-oriented policy that began in the late 1950s. By that time, the system of high price supports and relatively ineffective limits on supply (mainly too-large acreage allotments or marketing quotas) had resulted in a growth in farm output exceeding the demands of the market. As a result, government costs and inventories increased, and recognition grew that price supports were too high.

After several unsuccessful efforts to change farm programs, political compromise was reached in the mid-1960s that gradually reduced price supports to the levels of expected market-clearing prices or less, and provided direct payments to farmers to encourage participation in voluntary acreage reduction programs. This approach, embodied in the Food and Agriculture Act of 1965, permitted prices to decline in order to stimulate sales while subsidizing farmers who reduced their acreage. The act's basic concepts were contained in succeeding major farm acts in 1970, 1973, 1977, and 1981.

The policy transition reduced government controls on acreage and marketings and greatly increased farmers' operating flexibility. Farmers by and large were given the choice of whether to participate in farm programs. Those who participate receive the benefits of price-support programs, in particular, direct payments. On the other hand, those who stay outside the

farm programs may benefit from higher prices if the supply management effort works. Participating farmers have been given greater discretion in making production decisions. An important outcome of the policy transition is a greater reliance of the government on voluntary participation by farmers in managing supply.

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CHAPTER III. CHANGES IN U.S. AGRICULTURE

When farm programs were initiated in the 1930s, nearly 25 percent of the nation's population lived on farms and depended heavily on income from farming. Farming then was characterized by a large number of small farms that could be operated without close links to the nonfarm sector. Today's agricultural sector, accounting for just 3 percent of the population, is significantly and irreversibly different; it has become integrated not only with the domestic economy but with the international economy as well. This chapter highlights some of the important changes in farming over the last half century. Chapter IV then examines the implications of these changes for farm policy.

ECONOMIC INTEGRATION AND ORGANIZATION

In the late 1930s, the number of farms peaked at 6.8 million; by 1945, it had declined to 5.9 million; and by 1983 there were only about 2.4 million farms. The number of farms is still declining, though now at a much slower rate. Along with the decrease in numbers has gone an increase in average size and value. In 1950, farms averaged about 213 acres and $65,000 in total assets (in 1983 dollars); today, the average farm has around 430 acres and $395,000 in such assets. Moreover, the number of farms with 500 acres or more doubled during the last two decades, while the number with less than 200 acres fell sharply. Between 1945 and 1982, the total farm labor force--that is, all farm operators, hired workers, and unpaid family workers--also declined precipitously, from nearly 11 million to less than 4 million workers. Opportunities to enter farming likewise decreased, as modern farm technology and management increasingly required large capital investments, managerial skills, and a high level of technical expertise from farm owners and operators.

Modern technology has profoundly affected farming, farm productivity, and the organization and control of farm resources. The prosperous but labor-scarce years of World War II helped initiate a wave of farm mechanization, which radically increased farm productivity. To utilize the new machines fully, farmers purchased or leased land previously farmed by their neighbors. Hence, mechanization not only displaced farmworkers but led to an increase in the size of farms and in the amount of capital and the kinds of skills needed to sustain them. This, in turn, led to a decrease in the number of both farms and farmers.

Important functions once performed on the farm--such as the manufacture of feed, fertilizer, and seeds and the processing, storing, distribution, and marketing of farm products--shifted from the farm to the nonfarm sector. Purchased inputs, for example, now account for about 55 percent of the total farm input bundle, as compared with 44 percent in 1950. 1/

The prices of farm products have also declined in the last 30 years relative to the prices that farmers must pay for production inputs, such as farm machines, fertilizer, fuel, and feed. This relative price decline forced farmers to increase efficiency and expand the volume of farm production, in order to preserve their farm income. The steady rise in wages and salaries in the nonfarm sector also increased the pressure on those who remained in farming to buy more machines and expand their land base. Finally, as real per capita income rose, consumers spent a declining fraction of their income on food and other farm products. The fact that the demand for farm products increases less than the demand for all other goods and services has required continuous resource adjustment in farming. 2/ Much of that adjustment has occurred through an outflow of labor from the farm sector.

In short, American farms today are larger and more capital-intensive than several decades ago. Their primary function in the economy is to provide raw materials for processing, distributing, and marketing by nonfarm industries, upon which they have become highly dependent. To a significant degree, this new structure of agriculture reflects an urbanized and industrialized society that demands uniform products that can be efficiently handled, shipped, stored, and processed for consumer convenience. The modern farm is itself more specialized than in the past: a farmer is now far more likely to produce just one or two commodities rather than a mix of products.

Forces of Change

The changing organization of U.S. agriculture--the trend toward larger, fewer, and more specialized capital-intensive farms and the growing economic dependency of the farm upon the nonfarm sector--is primarily a

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1. Purchased inputs include all production inputs except operator and unpaid family labor and operator-owned real estate and other capital inputs.

2. D. Gale Johnson, Farm Commodity Programs, An Opportunity for Change, American Enterprise Institute for Public Policy Research (May 1973), pp. 16-19.

function of five highly interactive factors: technology, resource mobility, risk and uncertainty, financing, and public policy. 3/ Certainly, public policy is one of the most important.

Although nearly all public programs are enacted to help family-owned and -operated farms, the benefits are generally distributed in direct proportion to the volume of output, strongly suggesting that public policy has discouraged small farms. Commodity programs provide an example of the way in which public policies have encouraged greater concentration in farming. Expansion-oriented farmers have converted program benefits--reduced uncertainty, higher market prices, and government payments--into additional land, modern machines, and highly specialized production processes. 4/ Moreover, the knowledge that farm program benefits exist has driven up the price of farm land. Since the benefits of commodity programs have been capitalized into land values, the programs reward the landowner rather than the farm operator or farm worker.

Federal tax policy extends special treatment to individuals engaged in agricultural production; encourages the conversion of farm income into capital gains, which are taxable at a lower rate; and allows investment tax credits and accelerated depreciation. Moreover, tax policy treats farm businesses favorably compared to nonfarm businesses. Farms may use cash instead of accrual accounting, which gives farmers more flexibility as to when they report sales and purchases. Also, current expensing is allowed for certain farm development expenditures. As a result, effective income tax rates are generally lower for farm income than for nonfarm business income. 5/ Moreover, estate taxes are usually lower for farms. These

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3. See Peter M. Emerson, Public Policy and the Changing Structure of American Agriculture (Congressional Budget Office, 1978) pp. 42-45.

4. It is generally believed that as farms consolidated into fewer, more efficient, units the cost of producing food was reduced, thereby benefiting consumers. But recent studies indicate that further farm size expansion may result in only small efficiency gains. See J. B. Penn, "The Changing Farm Sector and Future Public Policy: An Economic Perspective," Agricultural-Food Policy Review: Perspectives for the 1980's, U.S. Department of Agriculture (1981). If so, continued growth in farm size may result mainly in greater wealth accumulation for landowners. Alternatively, there is some evidence that there are further efficiency gains to be captured by larger farms in the purchase of production inputs and the sale of farm products.

5. See Lyle P. Schertz et al., Another Revolution in U.S. Farming? (U.S. Department of Agriculture, 1979), pp. 64-73.

provisions tend to attract additional capital into farming, encourage rapid mechanization, and yield benefits in direct proportion to taxable income. The final outcome is encouragement of a capital-intensive agriculture with high land prices and fewer farms.

The impact on farm organization of other public policies is mixed. For example, government-subsidized agricultural credit assists young farmers and small-scale farmers who cannot obtain credit elsewhere, but it also promotes the expansion of existing farms. And while many aspects of agricultural research and extension are neutral with respect to farm size, relatively more attention has been directed to the production and marketing problems of large farms.

THE ECONOMIC STATUS OF FARM PEOPLE

Farming is dominated by a relatively small number of large, capital-intensive, full-time specialized farms whose operators depend upon income from farming. These commercial farms are in sharp contrast to the much larger number of small, part-time farmers whose livelihood comes largely from off-farm work. Farm families earn 55 to 60 percent of their total income from off-farm sources.

Today, about 12 percent of all farms produce most of the nation's food and fiber and earn most of the income from farming. These farms, with annual gross sales over $100,000, accounted for 68 percent of the total cash receipts from the sale of farm products in calendar year 1982 (see Table 1). These approximately 300,000 farmers had an average income from all sources of nearly $90,000. And in recent years they received about 90 percent of total net farm income. The farms in this group account for 47 percent of total farm assets and 58 percent of total farm debt, and have an average net worth of about $1.2 million (see Table 2). A second group of about 400,000 farms that contribute importantly to farm output are those with annual gross sales of $40,000 to $99,999; they are about 16 percent of all farms and have about 19 percent of farm cash receipts. These farms account for 25 percent of total assets, and 23 percent of total debt, and have an average net worth of $482,000. In sum, farms with annual sales of $40,000 or more--about 700,000 in number and 29 percent of all farms--receive nearly all net farm income and produce nearly 88 percent of total farm output (as measured by cash receipts).

The remaining 1.7 million farms with annual gross sales of less than $40,000 are about 71 percent of all farms but account for only 12 percent of farm output. A large number of these farms are rural residences or so-called "hobby" farms whose operators and their families rely mainly on off-

TABLE 1. FARM INCOME BY VALUE-OF-SALES CLASS, CALENDAR YEAR 1982

Annual Gross Sales (In dollars)	Number of Farms	Percent of All Farms	Percent of Total Cash Receipts from Farming	Average Net Farm Income Per Farm (In dollars) a/	Average Income Per Farm from All Sources (In dollars) b/
500,000 and Over	25,000	1.0	30.1	571,097	597,929
200,000 to 499,999	87,000	3.6	19.0	53,461	67,180
100,000 to 199,999	186,000	7.7	19.3	19,786	30,861
40,000 to 99,999	393,000	16.4	19.2	5,539	16,155
20,000 to 39,999	273,000	11.4	6.1	504	13,391
10,000 to 19,999	281,000	11.7	3.1	-728	16,479
5,000 to 9,999	331,000	13.8	1.8	-881	18,265
Less than 5,000	824,000	34.4	1.4	-678	19,507
Total or All-Farm Average	2,400,000	100.0	100.0	9,959	26,386
40,000 and Over	691,000	28.7	87.6	39,027	51,750

SOURCE: Congressional Budget Office from U. S. Department of Agriculture, Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics, 1982, ECIFS 2-2 (October 1983).

a. This average is computed by dividing aggregate net farm income by the number of farms. Net farm income includes net cash income from marketings, government payments and net loans, and other cash and nonmoney income less expenses. A farm is defined as any place that has $1,000 or more in annual sales of farm products.

b. This approximates average total income per farm family. Families or individuals operate about 90 percent of all farms as sole proprietorships. Corporations operate only 2 percent of all farms and are concentrated in the gross sales classes over $40,000. About 90 percent of these are family-held corporations.

TABLE 2. FARM BALANCE SHEET BY VALUE-OF-SALES CLASS, JANUARY 1, 1983

Annual Gross Sales (In dollars)	Percent of			Debt-to-Asset Ratio (In percent)	Per Farm		
	All Farms	Total Assets	Total Liability		Assets (In dollars)	Liabilities (In dollars)	Proprietors' Equity (In dollars)
500,000 and Over	1.0	10.9	18.5	35.9	4,137,229	1,486,945	2,650,283
200,000 to 499,999	3.6	15.7	18.6	25.3	1,707,856	432,687	1,274,899
100,000 to 199,999	7.7	20.5	20.4	21.4	1,044,618	223,145	821,473
40,000 to 99,999	16.4	24.8	22.5	19.4	598,707	116,352	482,355
20,000 to 39,999	11.4	10.0	7.3	15.8	345,235	54,718	290,517
10,000 to 19,999	11.7	6.2	4.5	15.7	209,287	32,755	176,532
5,000 to 9,999	13.8	4.8	3.2	14.3	136,316	19,552	116,765
Less than 5,000	34.4	7.1	5.0	14.8	82,183	12,188	69,995
Total or All-Farm Average	100.0	100.0	100.0	21.4	394,839	84,491	310,348
40,000 and Over	28.7	71.9	80.0	23.8	986,118	234,791	751,826

SOURCE: Congressional Budget Office from U. S. Department of Agriculture, Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics, 1982, Table B31, p. 131, ECIFS 2-2 (October 1983).

farm employment. In 1982 these farms had an average income of about $18,000, virtually all from off-farm sources. As a group they received nearly 80 percent of total nonfarm income earned by all farms.

Most farms, nearly 90 percent of all farms, are operated by families and individuals as sole proprietorships. Corporate farms account for 2 percent of all farms but produce about 22 percent of farm output; however, about 90 percent of corporate farms are family held. Corporate farms are concentrated in the production of cattle, poultry, fruits, and vegetables. While corporate farms represent an important share of farm output, family-operated farms dominate the production of the major crops supported by the government.

Clearly, commercial farms with annual sales over $40,000 dominate agricultural production. While aggregate data mask substantial differences among them, families on farms with sales of $100,000 or more earn incomes, on average, that are high relative to average nonfarm family incomes. Farms with sales of $40,000 to $99,999 appear to have average family incomes comparable to average nonfarm levels. It cannot be maintained that all commercial farmers are in sound economic condition, however. Some farm operators are experiencing financial hardships because of economic developments in the last three or four years. Within the past year, the combination of drought and acreage reduction programs has fostered more variation in individual incomes than ever before. Financial stress has reportedly increased the rate at which farmers and ranchers are going out of business in some sections of the United States. 6/

While commercial farms are profitable on average, a large number of rural-farm families fall below the poverty line. In 1982, the incidence of poverty among rural-farm families was 22.1 percent compared to 14.8 percent for nonfarm families. 7/ These poverty estimates are based on money income alone and do not include the value of noncash benefits such as food stamps, subsidized school lunches, public housing, Medicaid, and Medicare. The rural poor are primarily among those farmers who sell less than $10,000

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6. Based on surveys taken by the Federal Reserve Banks of Kansas City and Chicago, as reported in the St. Louis Globe-Democrat on December 29, 1983.

7. See Bureau of the Census, Current Population Report P-60, No. 140, "Money Income and Poverty Status of Families and Persons in the United States: 1982 (Advance data from March 1983 current population survey)."

of agricultural products annually and do not have adequate off-farm sources of income.

INTERNATIONALIZATION OF U.S. AGRICULTURE AND INCREASED INSTABILITY

Agricultural production has always been an inherently risky business, partly because of the vagaries of weather and of biological processes, and also because of the relative insensitivity of supply and demand to price changes. Today, however, crop farmers face even greater uncertainty from their linkages with international markets. Exports, which grew at a rate of 20 percent per year in the 1970s, are a major factor in crop farmers' incomes. Exports take the production from about two of every five acres, and generate one-fourth of total farm cash receipts. As producers have grown increasingly dependent on volatile export markets, their incomes have become sensitive to changes in weather and crop production in other countries, as well as to shifts in government policies here and abroad. Moreover, the system of flexible exchange rates rapidly transmits economic fluctuations from one country to another, and can dramatically change the relative prices of U.S. and foreign farm products.

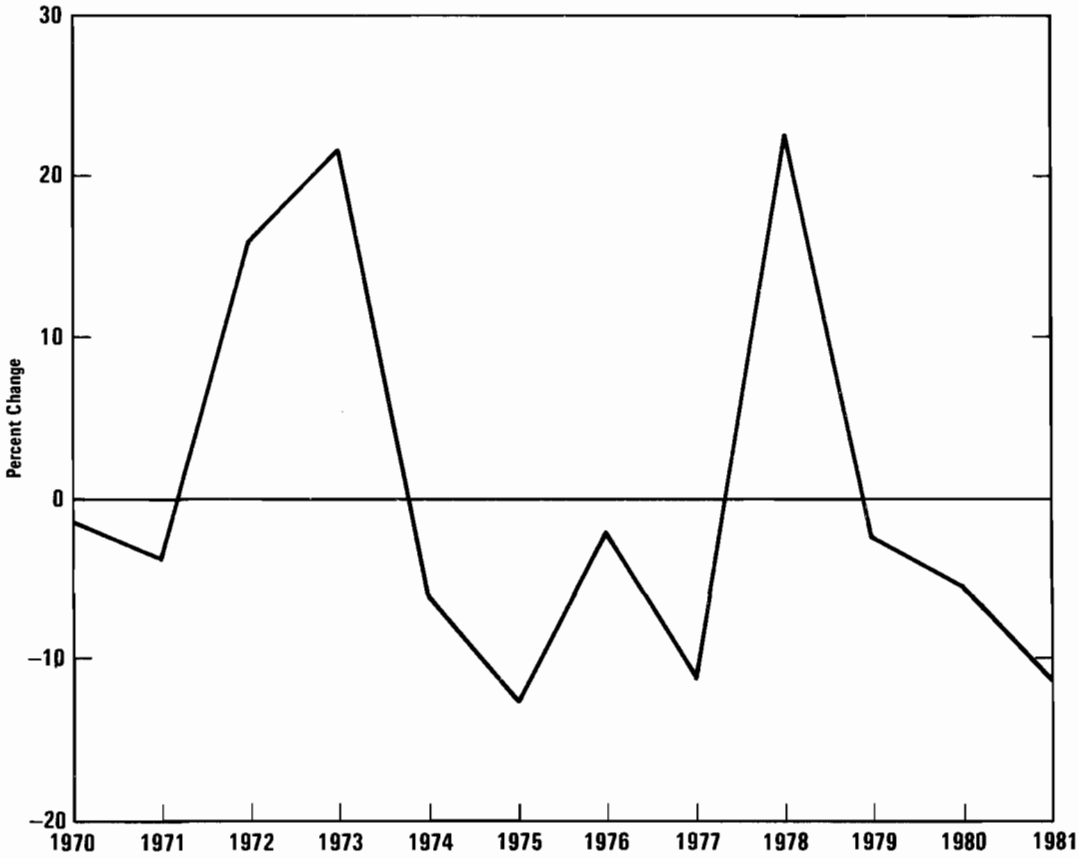
The United States is a residual supplier in world agricultural markets. That is, when world markets expand, as they did in the 1970s, U.S. farmers are likely to capture the largest share of the increase because of their productive capacity and large stocks. Conversely, they have difficulty in maintaining their share when world markets contract, as has occurred in the early 1980s. Their market position is determined by U.S. price support programs, worldwide economic and financial conditions, crop conditions, and foreign exchange rates. International politics--most important, U.S.-Soviet relations--have also exerted a strong influence, first boosting grain sales in the early 1970s and then causing them to decline at the end of the decade.

Other nations' trade policies also play a major part. They are able to sell their relatively much smaller agricultural surpluses at prices that undercut U.S. exports. Most nations that import farm products also have protectionist policies that cushion their producers and consumers from the impacts of fluctuations in world market prices. Thus, the United States, because of its relatively free trade practices and open agricultural markets, bears most of the burden of adjusting to changes in world trade. Relatively small changes in world grain production and trade can cause large unanticipated shifts in U.S. exports, creating price instability for farmers and consumers.

In short, the internationalization of U.S. agriculture, while allowing crop farmers to utilize their resources more fully and to earn higher average incomes, exposes them to new and pervasive sources of instability. As long as the United States maintains relatively open agricultural markets, crop farmers will remain vulnerable to volatile export markets. As a result, commercial farmers, who already have incomes that are quite volatile (see Figure 1) and more variable than incomes of nonfarmers, may face even greater year-to-year income fluctuations.

Figure 1.

Changes in Average Income of Farm Operator Families, 1970-1981 (Percent change from previous year)



SOURCE: U.S. Department of Agriculture. Farms with annual gross sales of $40,000 or more.

Income fluctuations are especially troublesome in that commercial farmers must spend heavily each year to produce their crops, often with borrowed money. Farmers carrying such short-term operating debt, as well as long-term debt for capital improvement, are susceptible to "cash flow" problems when their incomes fall. For that reason, a reduction in income fluctuations could benefit farm families as well as rural communities and agricultural industries.

Farmers have several options for dealing with income instability. They may bear income risks directly by diversifying their enterprises, by operating with less borrowed money and higher financial reserves, and by relying upon nonfarm income in bad years. Or they can transfer some of the risk to others in the private sector through forward contracting in the cash and futures markets. Farmers also transfer risks to financial institutions and insurance companies. In the past, farmers have transferred risks to the public sector through farm programs. But for several reasons, government programs are no longer as successful in stabilizing incomes. The following chapter examines why this is so, and discusses other limitations of current farm programs.

CHAPTER IV. THE LIMITATIONS OF CURRENT FARM PROGRAMS

While U.S. agriculture has undergone profound changes in the last half century, farm programs have not. Consequently, the programs now have much less influence over farm prices and incomes. This chapter highlights the limitations and shortcomings of the programs in terms of their major policy objectives, which are:

- To enhance farm incomes during periods of excess supply;
- To achieve reasonable stability in farm prices and incomes;
- To provide an adequate and stable supply of food and fiber for consumers at reasonable prices;
- To expand farm product exports; and
- To reduce the cost of farm programs to taxpayers.

In examining farm programs it is important to keep in mind the roles of the Executive and the Congress. Although farm programs are shaped by both the Congress and the Executive, the Congress gives broad discretionary authority to the Secretary of Agriculture to set farm policy and manage farm programs, authorizing certain minimum levels of price and income support and empowering the Secretary to make yearly program decisions. The minimum price and income support levels limit the flexibility of the Secretary to respond to changing market conditions, sometimes to the disadvantage of taxpayers and farmers. Yet, the year-to-year consequences of farm programs depend heavily upon administrative decisions, unless the Congress mandates specific program provisions. 1/

THE PROGRAMS' LIMITATIONS IN ENHANCING FARM INCOMES

For a number of reasons, farm programs have become progressively less able to support farm incomes. In the 1950s and 1960s, they were

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1. The most recent instance of a Congressional mandate was the Omnibus Reconciliation Act of 1982 in which the Congress required the Secretary of Agriculture to implement paid acreage diversion for the 1983 crops.

successful in raising farm prices and incomes in periods of excess supply above what they would have otherwise been. During that time, the government sought to reduce production. As shown in Table 3, 50 million acres were idled on average each year in the 1960s, amounting to 15-20 percent of planted acreage. These farm programs undoubtedly increased short-term incomes, but they also appear to have reduced farm incomes over the long term. It has been argued persuasively that the net effect of higher incomes coupled with lower risk and uncertainty was to induce changes in farming that had a contrary effect: farmers were encouraged to invest heavily and to adopt new technologies that emerged from agricultural research and development. 2/ As a result, agricultural production was greater, and farm prices and incomes were lower, than would have been the case without federal programs.

Farm programs had less influence on farm incomes in the 1970s, especially from 1973 on, when very favorable markets made it unnecessary for the government to intervene much to increase farm prices and incomes. Instead, price stabilization became the more important policy objective after the early 1970s as growing exports improved crop farmers' incomes. In the 1980s, in sharp contrast, government intervention has reached the highest level in history--as measured by price support outlays and acreage idled under government programs--but has not enhanced farm incomes significantly. There are several reasons for this.

The government attempts to raise farm income in two main ways--through making direct payments to farmers, and by managing supply (cutting production) to raise prices. But a farmer's net income usually increases less than his total government payments because typically he must forgo production and income to receive those payments. Supply management may enhance farm income to the extent that, by reducing crop production, it increases farm prices. But because slippage impairs the effectiveness of acreage reduction programs, these programs alone usually lead to small price increases. Moreover, supply management is now hobbled by the increasing importance of the export market; since foreign demand for U.S. farm products is generally thought to be more sensitive to price changes than is domestic demand, supply management has become a weaker

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2. See Frederick J. Nelson and Willard W. Cochrane, "Economic Consequences of Federal Farm Commodity Programs, 1953-72," in Agricultural Economics Research, vol. 28, no. 2, pp. 52-64 (April 1976); and Peter Helmberger and John Rosine, "A Neoclassical Analysis of the U.S. Farm Sector, 1948-1970," American Journal of Agricultural Economics, vol. 56, no. 4 (November 1974).

TABLE 3. INDICATORS OF GOVERNMENT INTERVENTION IN AGRICULTURE, FISCAL YEARS 1956-1983

Year	Commodity Loans and Inventory (In billions of 1983 dollars) a/	Price Support Outlays (In billions of 1983 dollars) b/	Acreage Idled Under Government Programs (In millions) c/
1956-1960 Average	24.7	5.7	24
1961-1965 Average	22.4	7.2	52
1966-1970 Average	11.9	8.0	54
1971	11.3	6.9	38
1972	7.4	9.5	62
1973	7.6	8.0	20
1974	3.2	2.0	3
1975	1.1	1.1	2
1976	1.2	1.8	2
1977	1.8	6.2	1
1978	6.1	8.6	18
1979	7.3	4.9	13
1980	6.1	3.3	--
1981	8.7	4.8	--
1982	9.2	12.0	11.1
1983	16.9	18.8	77

SOURCE: U. S. Department of Agriculture and the Congressional Budget Office.

a. Total value of outstanding commodity price support loans and government-owned inventories at start of the fiscal year.

b. Commodity Credit Corporation price support and related expenditures by fiscal year.

c. Acreage idled in calendar year in which fiscal year ends.

policy instrument for raising incomes as markets have become more international in character.

Whatever their overall effectiveness, government efforts to boost farm incomes are of small benefit to most farmers since they are distributed in direct proportion to output. In 1981, 6 percent of those participating in the wheat, feed grains, and upland cotton programs received 57 percent of total deficiency payments under these programs. 3/ On a farm basis, about 29 percent of all farms with sales of $40,000 or more receive roughly 80 percent of such payments. Large farms, those with sales of $100,000 or more and which account for only 12 percent of all farms, receive about 45 percent of payments. 4/

Moreover, roughly two-thirds of cash receipts from farming are from commodities not connected with crop price-support programs. About one-half of farm cash receipts are from animal products--cattle, hogs, poultry, and milk, the latter being heavily subsidized. The practical implications of this are twofold. Not only do the crop programs directly influence only about a third of U.S. gross farm income, but efforts to manage grain supplies can increase feed costs for animal products. Depending on several conditions, such as livestock production cycles and consumer incomes, higher feed costs can reduce the supply of animal products as well as the incomes of farmers and ranchers. Thus, programs to improve farm income can have uneven, and perhaps offsetting, effects.

Farm program benefits are eventually capitalized into farmland and drive land prices upward. As a result, farm program benefits accrue to landowners, many of whom are not farmers. In fact, farmers rent about 40 percent of their farmland, mostly from nonfarmer-landowners.

Finally, other policies, here and abroad, weigh heavily upon farm prices and incomes as a result of the integration of agriculture into the domestic and international economies. Macroeconomic, trade, and foreign policies can exert powerful influences on farm prices and incomes. As a result, farm programs alone have less effect on economic conditions in agriculture than in the 1950s and 1960s.

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3. Unpublished data from the United States Department of Agriculture.

4. U.S. Department of Agriculture, Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics, 1982, ECIFS 2-2 (October 1983).

THE PROGRAMS' LIMITATIONS IN STABILIZING FARM PRICES AND INCOMES

Agricultural markets have always been volatile, for a number of reasons: the effects of weather and biological factors on production; time lags between farmers' production and marketing decisions; and the relatively long lags with which supply and demand respond to price changes. This volatility was offset to a degree by government loan and inventory programs, acreage adjustments, and payments to farmers, which have made farm prices and incomes more stable than they would have been otherwise. Today, however, farmers are more vulnerable to the destabilizing effects of unanticipated changes in exports than during the 1950s and 1960s. Such changes can arise from variable weather and crop production in other countries, as well as from shifts in government policies here and abroad (see Chapter III).

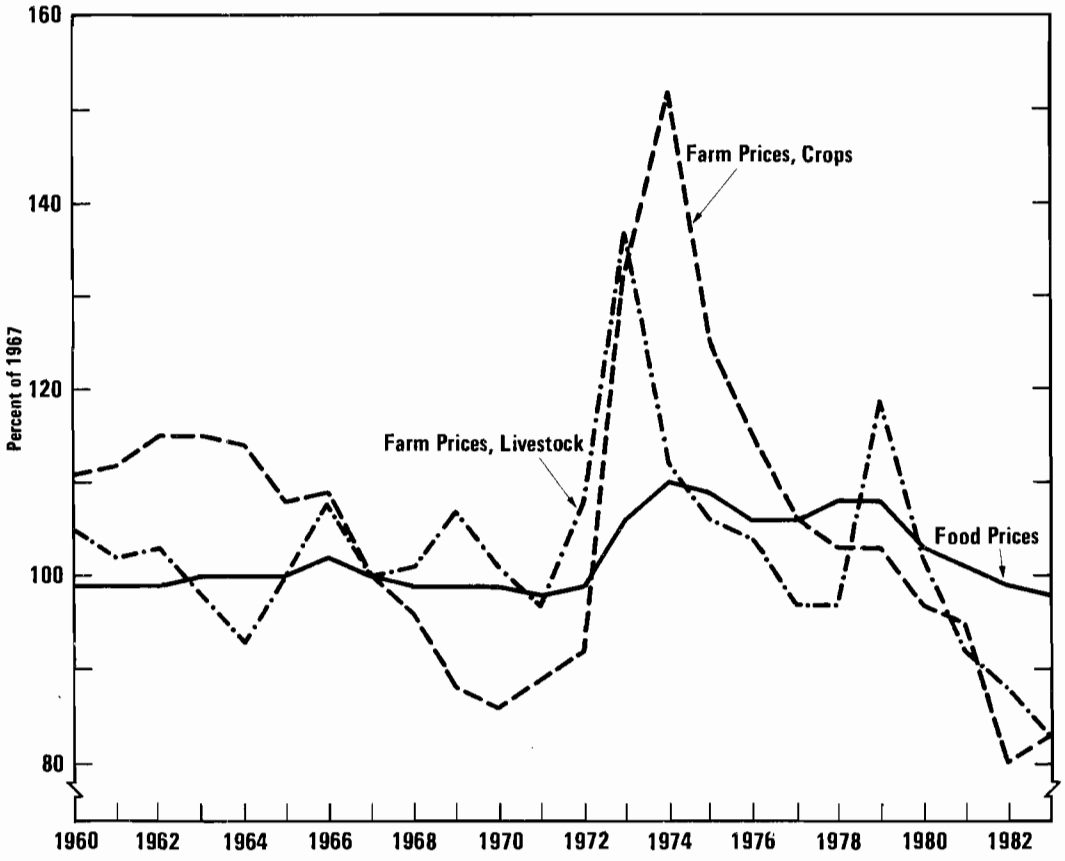
For these reasons, farm programs can no longer stabilize farm prices and incomes to the degree that they did in the past. An additional destabilizing factor may be the inconsistent and uncertain farm program management of the early 1980s. In 1981 and 1982, the farmer-owned grain reserve designed for price stabilization was used instead to enhance prices. Despite shrinking exports, falling crop prices, and pessimistic market forecasts, the government raised reserve loan rates above expected market-clearing levels. This encouraged farmers not only to build stocks but to produce for the reserve. Crop prices temporarily increased because of the high reserve loan rates, but carryover stocks burgeoned and program costs rose sharply. In 1982, good weather and an ineffective acreage reduction program resulted in large crops that drove market prices below loan rates and led to record stocks. In response, policy switched to large-scale acreage reduction incentives in 1983. Feed grain prices increased substantially as the acreage reduction program and a severe drought cut production. Thus, agriculture has been subjected to a whipsaw price effect that adversely affects livestock producers on the one hand and consumers on the other. Moreover, these recent program changes have created uncertainty about the direction of policy, perhaps adding to instability.

THEIR REDUCED INFLUENCE ON FOOD PRICES

The consumer, like the farmer, has become more vulnerable to market forces than formerly. Over the years, it is true, farm programs have helped provide more stable supplies of food at relatively low prices. Consumers have benefited from the long-term production efficiency induced by farm programs. As shown in Figure 2, real (inflation-adjusted) farm prices, while volatile, have declined over time--helping to keep the trend in real food

Figure 2.

Indexes of Real Farm and Food Prices, 1960-1983 (1967 = 100)



SOURCE: Congressional Budget Office.

NOTE: The indexes are calculated on the basis of indexes of prices received by farmers for crops and for livestock and of prices paid by consumers for food, divided by the Consumer Price Index and multiplied by 100.

prices relatively stable. On the other hand, government attempts to manage supply have had adverse effects on consumer prices, particularly when they coincided with poor yields or unanticipated increases in export demand. 5/

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5. In 1983 the combination of a massive acreage reduction program and drought will add an estimated one to two percentage points to the rate of increase in 1984 food prices.

Higher crop prices affect consumers in greatest degree through the supply and prices of beef, pork, dairy, and poultry products that make up about a third of the consumer price index for food (CPI-F). Feed grains and soybeans are 40 to 60 percent of the production costs for these animal products.

Another reason why farm programs have lost much of their stabilizing effect on food prices is that prices at the farm now constitute a relatively small share of the retail food dollar. Farm prices average just 27 percent of the CPI-F; food-marketing costs are about 55 percent; and the costs of imported foods make up the rest. Thus, consumers' food expenditures are more sensitive to nonfarm prices and wages and to macroeconomic policies than to farm programs.

THEIR EFFECT ON EXPORTS

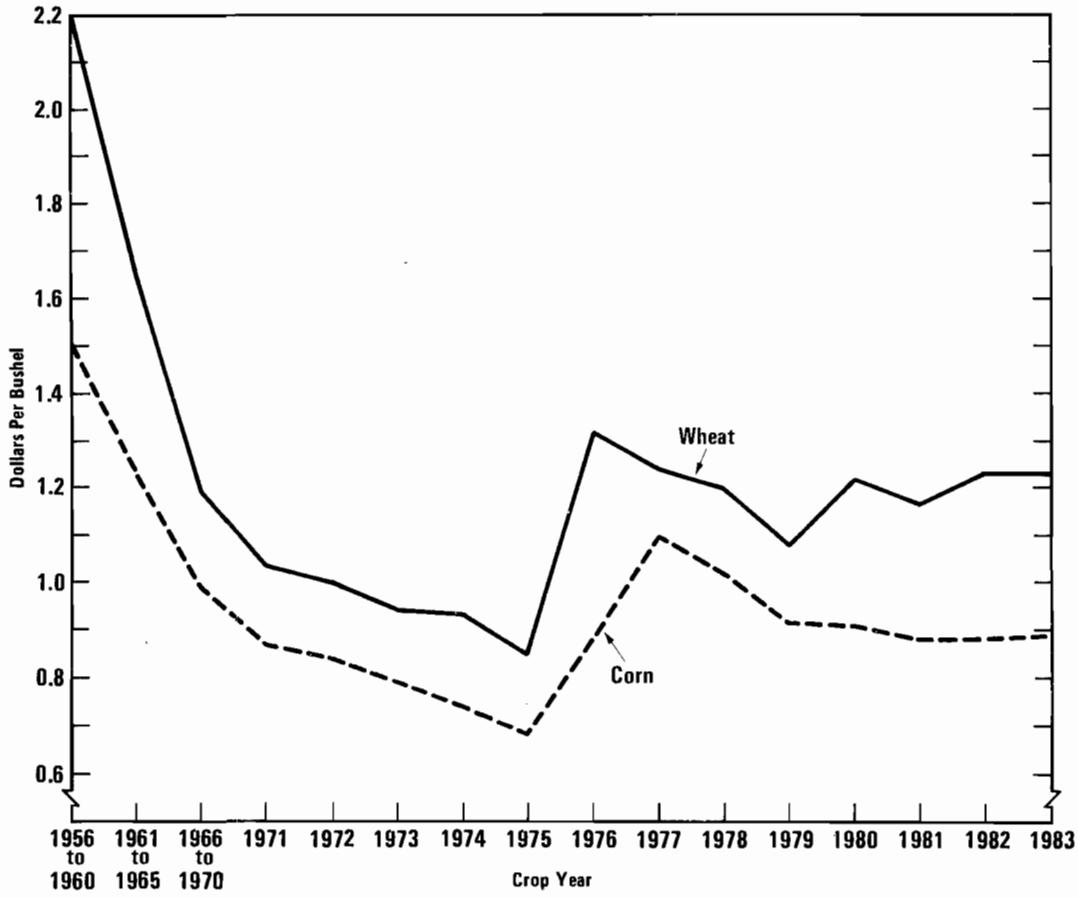
Price-support programs can work against exports. Foreign buyers and sellers know that U.S. farmers will "sell" grain to the government through the nonrecourse loan program and the farmer-owned grain reserve, rather than market it, when grain prices are at the price-support level. Since the United States is the largest exporter of grains, domestic price supports also place a floor under international prices. Foreign market participants know that the U.S. government will try to keep prices above price-support levels through supply management in order to reduce stocks and government outlays. If price supports are too high relative to market-clearing prices, or if supply management raises U.S. prices, then the prices of grains in international markets also will rise. In either case, overseas buyers will pay more for U.S. farm products and foreign sellers will receive higher prices for theirs.

Higher U.S. prices will thus discourage overseas consumption of U.S. farm products and set a price floor for other exporting nations. A higher price floor also leads other exporting nations to increase their production: since the late 1970s foreign wheat exporters have expanded wheat production by nearly 25 percent. These exporting nations, with their much smaller exportable surpluses, will cut prices in order to sell their increased output--thus taking away markets from U.S. farmers.

The influence of price-support levels on exports has long been acknowledged. In the mid-1960s, U.S. price supports were reduced with the result that real price supports (adjusted for inflation) declined through the early 1970s (see Figure 3). No doubt the lower price supports helped farmers to expand foreign sales. Price supports were raised substantially in the mid-1970s, partly in expectation that market prices would not be

Figure 3.

Real Nonrecourse Loan Rates for Wheat and Corn, Crop Years 1956-1983 (In 1967 dollars)



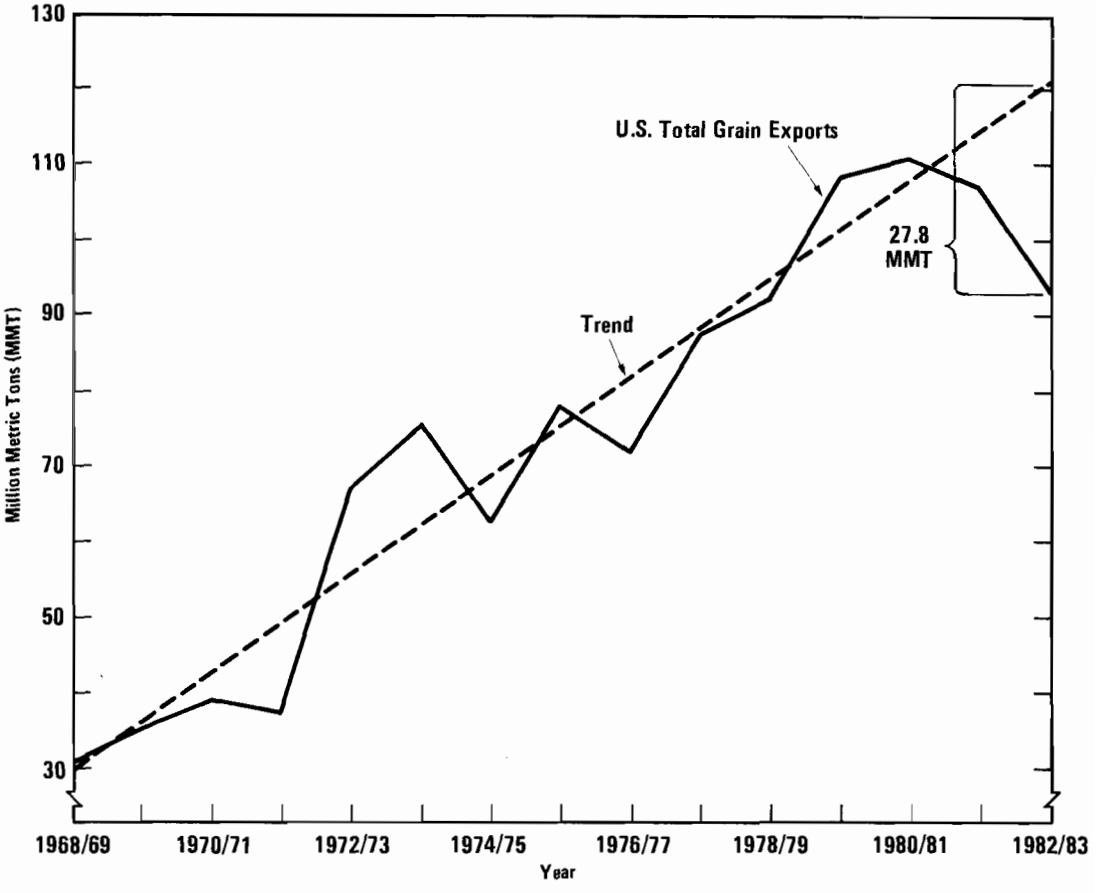
SOURCE: Congressional Budget Office from U.S. Department of Agriculture.

affected. (At that time, many thought that the rapid growth in export markets would be permanent.) The boost in price supports temporarily reversed the decade-long decline in real support levels, but, while they have fallen somewhat since the mid-1970s, grain price supports are still at levels that discourage exports. Further, flexible exchange rates mean that U.S. price supports can move in terms of other nations' currencies even though their dollar value is unchanged. Thus the United States now has less control

over the effects of price supports on demand than when the domestic market was dominant and exchange rates were relatively fixed.

The precise effect of U.S. price supports on foreign sales cannot be estimated, but they have manifestly contributed to a decline in grain exports. As shown in Figure 4, U.S. grain exports have fallen since

Figure 4.
Decline in 1982/1983 U.S. Grain Exports



SOURCE: U.S. Department of Agriculture.

1980/1981, and in 1982/1983 were well below trend. According to recent estimates, the increased exports of other nations and a fall-off in world market growth each account for roughly half the reduction in U.S. grain

exports. 6/ Wheat exports fell mainly because of competitive factors--mainly, increased subsidized exports from the European Community, and above-trend exports by major competitors, including Canada. The 1982 U.S. price support for wheat, in inflation-adjusted Canadian dollars, was about 15 percent higher than in the late 1970s, and nearly 70 percent higher than in the mid-1970s. Exports of corn (and other feed grains) fell, mainly because of reduced exports to Eastern European countries and below-trend imports by other nations. The 1982 U.S. price support for corn, in the inflation-adjusted currencies of key developed nations that buy U.S. feed grains, was about 30 percent higher than in the late 1970s. Therefore, even though real price supports for grains in the United States have changed little since 1980, they are much higher than in the mid-1970s and, after adjustment for dollar appreciation and different inflation rates, are much higher in the currencies of major buyers and sellers. In sum, the evidence suggests that U.S. price supports for grain, in combination with dollar appreciation, have contributed to a fall-off in U.S. grain exports.

Government loan and inventory programs have encouraged large stocks that help maintain exports when there are crop shortfalls. Such stocks contribute to making the United States a "reliable supplier." On the other hand, large U.S. stocks reduce the incentive for other nations to carry stocks; as a result, the United States typically bears most of the burden of adjustment to changes in world trade.

TAXPAYER COSTS OF THE PROGRAMS

Taxpayers have borne the largest share of the costs of crop price-support programs. Price-support outlays are highly variable from year to year (as illustrated in Table 4), since they move in an opposite direction from year-to-year changes in farm prices and incomes. 7/ Erratic price-

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6. U.S. Department of Agriculture, Foreign Agriculture Circular, "Grains" FG-33-83, October 28, 1983.

7. Commodity Credit Corporation (CCC) net outlays (or net expenditures) are basically cash outlays minus cash receipts. Outlays are of two types: (1) recoverable, mainly price-support loans and purchases; and (2) unrecoverable, including payments to farmers, interest on borrowings from the Treasury, and administrative expenses. Net realized losses, on the other hand, include the above unrecoverable outlays plus losses on the disposition of CCC-owned commodities. Over the long term, average net outlays and net realized losses are approximately equal; however, there are often substantial year-to-year differences.

TABLE 4. COMMODITY CREDIT CORPORATION PRICE-SUPPORT AND RELATED EXPENDITURES, FISCAL YEARS 1961-1984 (In millions of dollars)

Year	Major Crops a/	Other b/	Total
1961-1965 Average	1,546	673	2,219
1966-1970 Average	2,287	531	2,818
1971	1,576	1,246	2,822
1972	3,289	694	3,983
1973	2,114	1,441	3,555
1974	1,561	-557	1,004
1975	433	142	575
1976	359	575	1,014
1977	2,812	997	3,809
1978	3,321	2,302	5,623
1979	1,647	1,925	3,572
1980	2,153	564	2,717
1981	1,370	2,630	4,000
1982	8,989	2,609	11,598
1983	12,549	6,208	18,757
1984 Projection	1,449	4,504	5,953

SOURCE: Congressional Budget Office.

NOTE: Minus signs indicate net receipts.

a. Wheat, feed grains, rice, upland cotton, and soybeans.

b. Includes dairy and other commodity programs, interest, and administrative and nonadministrative expenses.

support outlays, especially the phenomenal increases that occurred in 1982 and 1983, complicate fiscal controls.

Crop outlays averaged about $2 billion yearly from the mid-1960s through fiscal year 1981, and fell in real terms in the 1970s (see Table 3). Significantly, the decline in real outlays happened even as crop production increased--annual output in 1976-1980 averaged about 25 percent more than in 1967-1972. The causes of this trend were twofold: policy changes, in particular the decline in real price support levels that helped farmers to sell their crops overseas; and exports that kept farm prices above price- and income-support levels.

In the 1980s, record price-support outlays--$18.8 billion in fiscal year 1983--are a vivid reminder of the 1950s and 1960s. Large crops, price and income supports that are high relative to market-clearing prices, and shrinking export markets still expose taxpayers to very high farm program costs. These outlays are projected to remain high in coming years, averaging $12.1 billion in 1985-1988.

CHAPTER V. ALTERNATIVE DIRECTIONS FOR FARM POLICY

This chapter discusses several alternatives to current farm policy, viewed in the context of today's agriculture. It suggests that a choice among the alternatives depends upon which of two main policy objectives the Congress adopts: price and income stabilization or income enhancement. For each of these objectives, a number of options are available. This chapter examines the implications of some of the principal options.

STABILIZATION VS. ENHANCEMENT

Existing farm programs have been designed with a variety of objectives in mind: increasing farm incomes, stabilizing farm prices and incomes, moderating food price increases, stimulating agricultural exports, and minimizing budget costs. But these objectives often conflict. This is particularly true for the objectives of stabilizing farm incomes and of increasing them.

Stabilizing farm incomes means moderating the pattern of boom and bust in agricultural markets, raising prices when they are unusually low and dampening them when they rise rapidly. This implies accepting the long-term average level of farm prices and incomes dictated by the market. Stabilization is viewed as a desirable policy goal because it eliminates some of the uncertainty associated with farming and helps farmers, who are often highly leveraged, to overcome cash-flow problems. Enhancing farm incomes, in contrast to stabilizing them at market levels, implicitly views the long-term average level of farm prices as unacceptably low. The aim is to raise farmers' incomes to enable them to remain in agriculture.

The Need for a Choice

These two views of farm policy are incompatible, particularly within the framework of current programs. In making future farm policy, the Congress will need to decide whether or not the expected trend in long-term farm prices and incomes is acceptable--that is, to decide whether the primary aim should be to stabilize farm prices and incomes or to enhance them.

This choice should be considered in light of the realities of U.S. agriculture--especially that a relatively small number of large farms,

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mostly family operated, produce most of the nation's farm products. These farm families have average income substantially above that of most farm families, and also above that of average nonfarm families. The case for income enhancement rests with low-income farm families. If more farm families could attain a better standard of living, society, and particularly rural communities, might benefit. Current farm programs, however, base benefits on the volume of crop production and therefore cannot effectively target income support to small farms, nor to farms that do not produce supported commodities.

Income stabilization may be a more credible contemporary policy objective than income enhancement. A growing share of the output of commercial farmers goes to volatile foreign markets. Uncertainty about future incomes makes planning and investment decisions more difficult, and can lead to unnecessarily volatile farm prices and output, and inefficient production. Moreover, because of their greater debt and specialization many farmers are now more vulnerable to market uncertainties.

In the 1980s, the government has attempted to raise farm income by building stocks to support prices above market-clearing levels, making large income transfers to farmers, and implementing an unprecedented acreage reduction program. But using stabilization tools--the farmer-owned reserve, nonrecourse loans, and government stocks--for income enhancement has been of limited benefit to most farmers and has imposed record costs on taxpayers.

A dilemma of current policy is that both stabilization and income enhancement are now far more costly and difficult to achieve within the framework of existing farm programs. To continue current policy would mean relying on much the same approach as in recent years: inflexible price supports, price stabilization within a narrow price range, escalating target prices, and supply management with emphasis on the farmer-owned grain reserve and government stocks. As compared to ending farm programs, however, continuing current policy would result in less volatile farm prices and incomes if programs were managed consistently. 1/ Under current policy, taxpayers would continue to bear the largest share of farm program costs. As shown in Table 5, crop outlays are projected to average $8.4 billion annually over 1985-1988, nearly four times the 1972-1982 average. 2/ Consumers, for the most part, would be little affected by a

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1. The Appendix discusses the implications of eliminating farm programs.

2. Detail of the current policy projection is presented in CBO's An Analysis of the President's Budgetary Proposals for Fiscal Year 1985 (February 1984).

TABLE 5. CONTINUATION OF CURRENT POLICY: COMMODITY CREDIT CORPORATION PRICE-SUPPORT AND RELATED EXPENDITURES, FISCAL YEARS 1972-1988 (In millions of dollars)

Program	Average 1972-1982	1983	Projection 1985-1988 Average	Projection 1985-1988 Likely Range a/
Major Crops b/	2,572	12,549	8,385	4,385 to 12,385
Other c/	1,219	6,208	3,755	1,955 to 5,555
Total	3,791	18,757	12,140	6,430 to 17,940

SOURCE: Congressional Budget Office.

a. Based on plus or minus one standard deviation as computed from 1972-1983 data.

b. Wheat, feed grains, rice, upland cotton, and soybeans.

c. Includes other commodity programs, and administrative and non-administrative expenses.

continuation of current policy except as efforts to manage supply might run the risk of escalating grain prices, and therefore meat and poultry prices. Current policy would work against agricultural exports through its inflexible price supports and management of supply.

Thus, current policy poses a variety of potential problems in coming years. Policy could be improved, however, if policy objectives and instruments are made consistent. The remainder of this chapter discusses the implications of policy options for both the stabilization and income-

enhancement objectives. 3/ Under any of these options, highlighted in Table 6, policy tools would be targeted to policy objectives.

THE STABILIZATION OBJECTIVE: POLICY OPTIONS

Two stabilization options are discussed below: modifying current policy to focus on price stabilization rather than income enhancement, and using farm revenue insurance to help stabilize incomes rather than farm product prices. Under either stabilization option, however, the Congress must be willing to accept the long-term average market level of farm prices and incomes.

Market-Oriented Price Supports

In contrast to current policy, in which price supports (nonrecourse loan rates) are set at or near market levels, a market-oriented price support system would establish a wider band for allowable price fluctuations. Price supports would be set below current policy levels but both price supports and reserve trigger prices would be flexible, changing with market prices. A "price corridor" bounded by loan rates and trigger prices could be based on a formula that included past market prices. For example, nonrecourse loan rates for grains could be set at some percentage--perhaps 85 percent--of a simple moving average of the last five years' market prices. This would be similar to current policy for soybeans. The Congressionally mandated minimum nonrecourse loan rates would be eliminated or set at levels unlikely to interfere with the formula. Loan rates based on a percentage of recent market prices could increase U.S. agricultural exports by reducing the incentives to overseas production and by stimulating foreign demand for U.S. farm products.

Price stabilization--rather than income support--would be the primary objective. Reserve and government stocks would accumulate when market prices fell and would be released when prices rose above the trigger price. But the price stabilization band would be wider than under current policy and would move in the same direction as the long-term price trend.

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3. This analysis assumes that other policies affecting agriculture are unchanged, in particular, those policies aimed at increasing U.S. farm product exports.

TABLE 6. FARM POLICY OPTIONS

Policy Option	Key Features
Current Policies	**Price supports** below expected market-clearing prices but inflexible. **Price stabilization** (narrow price range) via reserve and government stocks. **Income support** by deficiency payments with escalating target prices. **Supply management** by acreage reduction and reserve and government stocks; more emphasis on stock management than acreage diversion.
The Stabilization Objective	
Market-oriented price supports	**Price supports** below current policy but flexible. **Price stabilization** (wider price range than under current policy) via non-recourse loans, the reserve, and small government stocks. No deficiency payments. No **supply management** by acreage reduction.
Farm revenue insurance	No **price supports.** **Price stabilization** limited to government stocks to protect consumers. No deficiency payments. No **supply management** via acreage reduction.
The Income-Enhancement Objective	
Production controls	**Price supports** above current policy levels. **Price stabilization** via small reserve and government stocks. **Income support** by **mandatory acreage allotments** and **marketing quotas.**
Targeted income maintenance	**Income support** by government payments to assure a minimum income floor for individuals and farm families.

The income-enhancement features of current policy would end. There would be no deficiency payments nor authority to reduce acreage. 4/

As compared to current policy, market-oriented price supports would reduce the frequency of government intervention to manage supplies and prices. Markets would be the main determinant of prices and incomes. Crop prices would average a little below those under current policy since price supports would fall relative to current policy levels and acreage restrictions would be eliminated. Consequently, food prices might also decline, but not by much given the low proportion of food costs accounted for by farm products. Despite a wider price stabilization band, prices might be more stable than under current policy if programs were managed consistently with a stabilization objective. People engaged in agriculture would be more certain of government policy than at present.

The effect of market-oriented price supports on farmers' incomes is uncertain. If the program began for the 1985 crops, farmers would lose an average of $5-6 billion each year in deficiency payments if target prices continued to escalate as under current policy. But this would not reduce net income by an equal amount, since production and income are typically forgone to get these payments. And average production would be larger with no acreage reduction under this stabilization policy.

Taxpayer costs would be smaller under market-oriented price supports. Savings would be achieved by eliminating deficiency payments and by carrying smaller reserve and government stocks, yielding total savings of about $7 billion annually over fiscal years 1986-1988.

This stabilization policy would stimulate agricultural exports more than current policy for several reasons. First, flexible (and, presumably, lower) price supports would force U.S. farmers to seek greater sales in international markets. Second, price supports would reflect the trend in prices, and therefore would not discourage foreign demand as much as inflexible supports. Third, price supports would provide a lower price floor for competing exporters, perhaps leading them to reduce production. Lastly, if the United States carried smaller stocks, other nations would have greater incentive to carry larger stocks. This would spread the burden of adjusting to changes in world markets among other nations. Some grain-importing nations, however, could choose to increase their grain production as opposed to increasing their stocks via imports.

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4. The acreage reduction authority could be continued and used if stocks became too burdensome. But acreage reduction could be used for income enhancement.

Farm Revenue Insurance 5/

Revenue insurance, provided by the federal government, would attempt to directly stabilize incomes instead of prices. Such a program would subsume deficiency payments, acreage reductions, and price-support loans. It could be an extension of federal crop insurance, which insures against production losses. A farmer would be guaranteed that his revenue per acre of each crop would not fall below some proportion of expected revenues. For example, a corn farmer might insure 75 percent of average revenues per acre based upon recent experience. If revenue from the corn crop was less than the insured level--due to either low yields or low prices--the farmer would receive an indemnity equal to the difference. An indemnity would not be paid if revenues were inside the normal range of variation.

In this manner, revenue insurance would protect farmers against precipitous declines in gross income regardless of whether price or production variability was the cause. For this protection, farmers would ideally pay an annual premium that reflected their individual risks, thus reducing the possibility that farm revenue insurance might encourage inefficient farming.

As compared to current policy, revenue insurance might provide farmers with better protection against fluctuating incomes. Farmers, rural communities, and agricultural industries would benefit if sharp swings in farm income were dampened. Furthermore, the government would not intervene as frequently to stabilize prices as is now the case--reducing direct government influence on prices and supplies. Moreover, the uncertainty created by unanticipated policy changes would be reduced.

Without price-support programs, however, prices would be more unstable since nonrecourse loans and the farmer-owned reserve trigger price would not set a price floor or a price ceiling. But a government grain reserve could still protect consumers against sudden and unexpected commodity shortages. Consumers, given such a reserve, would probably not experience any major differences in food supplies and prices.

From a budget viewpoint, farm revenue insurance costs would depend upon the specific insurance provisions, the level of coverage and probability of losses, the premiums charged, and farmer participation. But for several

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5. See Congressional Budget Office, Farm Revenue Insurance: An Alternative Risk-Management Option for Crop Farmers (August 1983), which discusses several important constraints to a workable farm revenue insurance program.

reasons, revenue insurance would probably cost less than current programs. First, 30 to 40 percent of price-support outlays are for price stabilization activities; even with a government grain reserve, price stabilization costs could be smaller. Second, the administrative and operating expenses of an insurance program would probably be no greater than the costs of current programs. Third, farmers would pay some costs through insurance program premiums.

Farm revenue insurance, when compared to current policy, would have important differences for agricultural exports. Price supports would not influence international prices. Therefore, an insurance program would not discourage overseas consumption of U.S. farm products and stimulate foreign production. Prices would move more rapidly to market-clearing levels in response to supply movement (subject to the dampening effect of government reserves). This would make it more costly for other exporting nations to maintain acceptable prices and incomes for their producers. Further, as with market-oriented price supports, other nations would be more inclined to carry large stocks, some by importing more and others by increasing production. In sum, as compared to current policy, exports would tend to increase under this stabilization policy.

There are other ways to protect farmers against volatile incomes. One example is Canada's Western Grain Stabilization Program (WGSP). Its objective is to stabilize farmers' annual cash flow--the difference between cash receipts and cash production expenses. A farmer may join the program and drop out during the first three years of his enrollment; after three years, he must stay in the program. Farmers pay a portion of their proceeds from annual grain sales into a stabilization fund and there is a maximum yearly contribution. The Canadian government's annual contribution is twice the farmers' contribution. At the end of each year, industry cash receipts, production costs, and the net cash flow are estimated. If the estimated cash flow is below the average for the previous five years, a payment is made to participating producers. The total payment is the difference between the current cash flow and the five-year average, the payment to each producer being proportional to participation.

THE INCOME-ENHANCEMENT OBJECTIVE: POLICY OPTIONS

Two income-enhancement options are examined in this section. The first is production-based--that is, income support would be tied to the volume of crop production. This option would rely heavily on mandatory acreage or marketing restrictions to enforce higher market prices at the expense of consumers. The second option, which would be a drastic movement away from traditional programs, would provide a minimum

income floor for farm families independent of the commodities they produce.

Production Controls

The key features of a farm income-enhancement program would be:

- o Price supports above current policy and long-term market-clearing prices;
- o Prices stabilized within a narrow price range with small reserve and government stocks;
- o Mandatory acreage controls and marketing quotas to keep prices above price-support levels without building government stocks; and
- o Incomes enhanced via supply management--deficiency payments ended.

Prices would be higher than under current policy. Restricted output and higher prices would raise gross incomes in the intermediate term, production costs would be reduced, and net incomes would be higher. But in the longer run the income effect would be less certain. Higher prices, with everything else constant, would reduce demand, particularly in overseas markets, where higher prices encourage foreign competitors. Thus, declining foreign sales could undo the effect of higher prices on farm incomes.

Consumers could face significantly higher food prices. Domestically, the greater price effect would be on meat, poultry, and dairy products, since higher crop prices would increase animal product production costs. For example, a 20 percent increase in feed grain and soybean prices would raise the consumer price index for food by one to two percentage points.

Budget costs would be smaller, as compared to current policy, if crop production was limited through mandatory controls instead of government payments. In other words, incomes would be boosted through higher prices, not income transfers. Effective production controls would reduce crops under government loan and in government stocks.

A supply reduction policy would harm agricultural exports. Higher U.S. prices would increase the prices that foreign buyers would have to pay for U.S. products. And by restricting output and keeping domestic prices above market-clearing levels, the United States would encourage other

exporting nations to increase output and undercut U.S. sales. To counter this, the United States could employ export subsidies as in the 1950s and 1960s, but they would be costly to taxpayers. 6/

The benefits of higher incomes would go to a relatively small number of farmers--those commercial farms that produce most of the nation's crops. Ultimately, the benefits would be capitalized into farmland, thereby driving farmland prices upward and making entry into farming more difficult. The net gainers would tend to be landowners, many of whom are not farmers. Thus, an income policy based on supply reduction might work against an objective of increasing the number of farm families earning satisfactory incomes from farming.

Targeted Income Maintenance

A production-based income enhancement policy benefits only those individuals and families that produce certain commodities, and further, the benefits are in proportion to production. An alternative policy would be targeted income maintenance to keep individual or family incomes at a minimum level, regardless of the commodities produced. The program would establish a minimum income floor for farm families who wished to participate. The minimum income floor could be scaled by family size, location, and other factors, including the availability of other public assistance programs. An income-maintenance program would have to be structured so as to not destroy individual incentives to work, or encourage the break-up of families. In brief, transfer payments would be made to assure individuals and families that their incomes would not fall below a minimum level.

There is no assurance that a minimum-income floor would keep people in farming--some would probably continue to switch to nonfarm employment--but it would probably be more successful in doing so than current policy. No doubt there would be problems in developing, implementing, and operating such a program. But experimental rural income-maintenance programs in the late 1960s and early 1970s demonstrated their feasibility. 7/

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6. See Congressional Budget Office, Agricultural Export Markets and the Potential Effects of Export Subsidies (June 1983).

7. See U.S. Department of Health, Education and Welfare, Rural Income Maintenance Experiment, Summary Report (November 1976).

Targeted income maintenance, as compared to current policy or production controls, would be more effective for raising the incomes of low-income farm families and individuals. Moreover, it would mesh well with a stabilization policy for commercial farmers, by allowing markets to determine farm prices while targeting its attempts to keep low-income farmers in agriculture. If combined with a stabilization policy, income maintenance would provide consumers with food prices similar to those of current policy. Income maintenance would not interfere with agricultural trade as does current policy. But the taxpayer costs of targeted income maintenance could be quite high, depending on the level of the income floor, the number of participants, and other program details.

EPILOGUE: THE POLICY CHOICES

Depending upon its objectives, the Congress has several farm policy choices. A stabilization policy would mesh with the realities of farmers' dependence upon volatile markets, and be consistent with an export expansion objective. Taxpayers could be better off with a stabilization policy, and consumers would not fare much differently than under current policy. In contrast, an income-enhancement policy based on production controls would mainly benefit landowners with only limited effects on long-term farm income. Although taxpayer costs would be smaller under mandatory production controls, consumers would bear the costs through higher food prices while exports would suffer. In contrast, targeted income maintenance would raise the incomes of low-income farm families, and, in combination with a stabilization policy, would not harm consumers and exports. Taxpayers' costs could well increase, however, as compared to current policy.

There are formidable barriers to changing farm policy. History shows that change occurs slowly and in small steps, and that any policy requires long-term consistency in program management. Since the 1930s the Congress has given the Executive much discretion to manage farm programs, and indeed to shape farm policy, but has frequently intervened to limit such discretion or to alter short-term policy. To achieve consistency, the Congress and the Executive must have similar views. The challenge to decision makers is not a lack of alternatives, but the need to set consistent objectives and to use appropriate policy tools.

APPENDIX

APPENDIX. FREE-MARKET POLICY

A free-market policy--no farm programs--would have consequences that cannot be predicted with certainty. Free-market results can be assessed by extending the analysis of the historical consequences of farm programs. Perhaps the most comprehensive study of the economic consequences of farm commodity programs (for the 1953-1972 period) was conducted by Nelson and Cochrane. 1/ This study estimated the results of a free-market policy as compared to actual outcomes. A larger supply of farm products in the initial years of a free market would have caused farm prices and incomes to fall, but supply would eventually have lagged, causing prices and incomes to be higher. Reduced incomes and more variable prices under a free market would have reduced capital investment; farmers would have substituted cropland and labor for machinery, fertilizer, and other purchased inputs, and farm productivity would not have increased as much.

Inferences for a free-market policy in the 1980s can be drawn from this study, but caution is necessary because of the changes that have occurred in the agricultural sector. One can assume that an absence of farm programs would mean a period of excess supplies, accompanied by falling prices and incomes. A number of farmers--particularly those with substantial debt--would have to leave farming sooner than they might otherwise. Over the longer term it is possible that crop production would be smaller, and therefore average prices and incomes higher. (This outcome is based on the assumption that farm programs reduce farmers' risk and uncertainty and lead to greater output.) But prices and incomes would fluctuate more.

Variable crop prices under a free-market policy could be a disadvantage to consumers, who benefit from stable supplies and prices. Consumers would most likely feel the effects in the prices and supplies of animal products. However, a free-market policy would not prevent the maintenance of government reserves to protect consumers.

A free market would have several international implications. First, U. S. price supports would no longer provide a floor under international

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1. See Frederick J. Nelson and Willard W. Cochrane, "Economic Consequences of Federal Farm Commodity Programs, 1953-72" in Agricultural Economic Research, vol. 28, no. 2, pp. 52-64 (April 1976).

prices; other exporting countries would face greater price risks, and their production patterns and levels would probably be changed. Second, prices paid by overseas buyers would no longer be influenced by U.S. price supports, but primarily by market forces. Third, the absence of large U.S. reserve and government stocks would increase the instability of international markets, and probably induce other nations to increase their production and carry larger stocks. Finally, without government stocks, the United States would be less capable of maintaining exports when production shortfalls occurred.