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CONGRESSIONAL BUDGET OFFICE

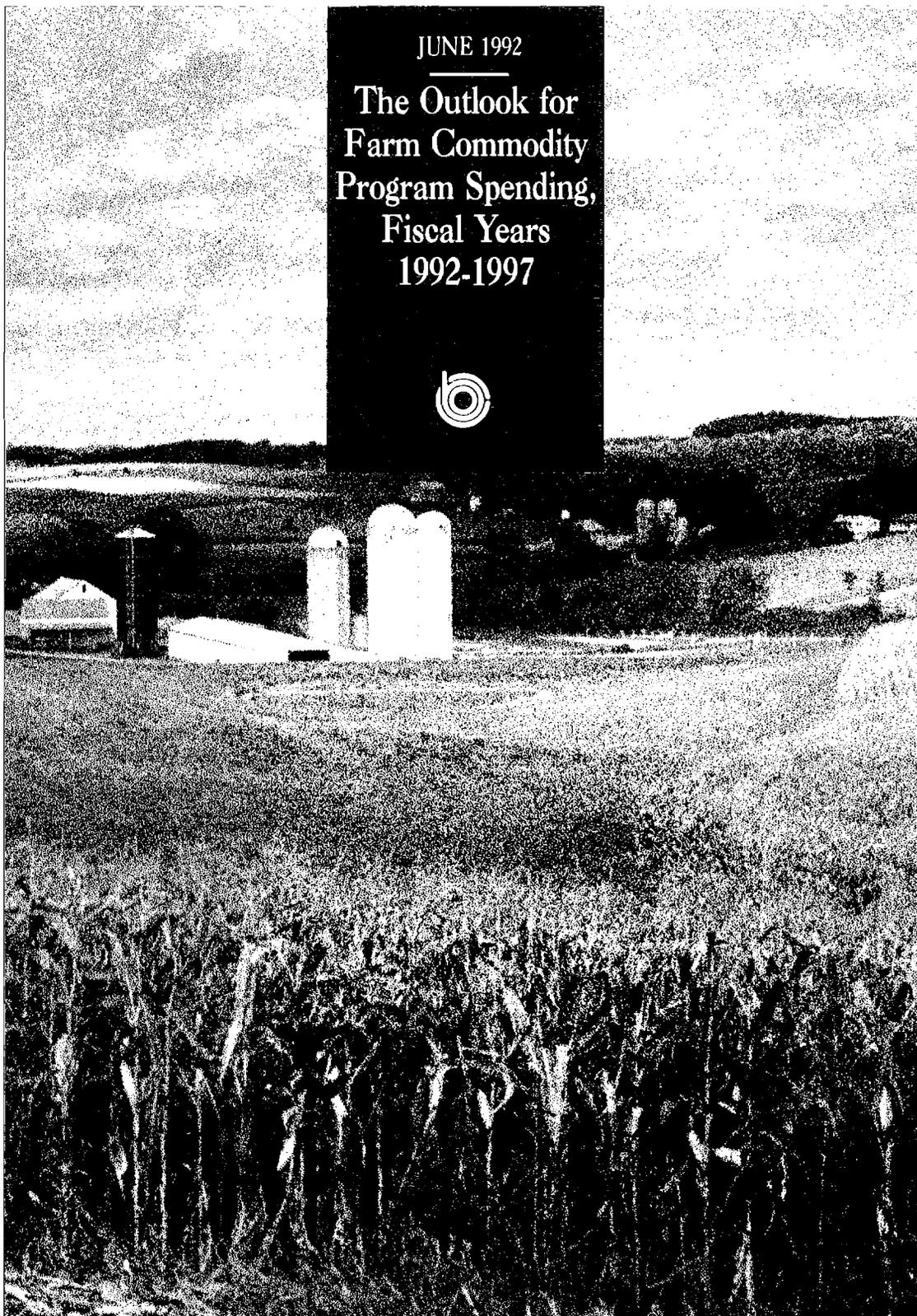
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CBO

STUDY

JUNE 1992

**The Outlook for
Farm Commodity
Program Spending,
Fiscal Years
1992-1997**



**THE OUTLOOK FOR FARM
COMMODITY PROGRAM SPENDING,
FISCAL YEARS 1992-1997**

The Congress of the United States
Congressional Budget Office

NOTES

Details in the text and tables of this study may not add up to totals because of rounding.

A crop year (or marketing year) is the 12-month period beginning at the time of harvest. Crop years for major crops are:

Corn--September through August
Wheat--June through May
Rice--August through July
Cotton--August through July
Soybeans--September through August

Crop years are identified by the year in which they begin. For example, the 1991 crop year for corn extends from September 1991 through August 1992. The dairy marketing year coincides with the fiscal year and is identified similarly; that is, the current marketing year extends from October 1991 through September 1992.

Units of measure used for commodities in this study are:

Corn--one bushel = 56 pounds
Wheat--one bushel = 60 pounds
Rice--one hundredweight = 100 pounds
Cotton--one bale = 480 pounds
Soybeans--one bushel = 60 pounds

Use of dairy products and net purchases of the Commodity Credit Corporation are measured in pounds of milk equivalent, converted on the basis of milkfat content.

Preface

Outlays for the farm price and income support programs of the Commodity Credit Corporation (CCC) vary from year to year. The outlays depend on such factors as weather, agriculture and trade policies, the administration of U.S. farm programs, the overall performance of the U.S. economy, and conditions in worldwide commodity markets. This study provides detailed information about CCC outlays included in the Congressional Budget Office's most recent budget outlook. CBO's budget outlook is part of its annual report to the Committees on the Budget, which is required by law, and includes five-year projections of outlays for the entire federal budget. In keeping with CBO's mandate to provide objective and impartial analysis, this study contains no recommendations.

The study was prepared under the supervision of Roger E. Hitchner and Robert A. Sunshine as a joint effort of the Natural Resources and Commerce Division and the Budget Analysis Division. Victoria A. Greenfield coordinated the study. Portions were written by Victoria Greenfield, Roger Hitchner, David B. Hull, Eileen M. Manfredi, and Andrew S. Morton. Victoria Farrell and James Horney of CBO provided valuable comments and criticism. The authors wish to thank Charles E. Hanrahan and Remy Jurenas of the Congressional Research Service for their helpful comments. Roger M. Williams edited the manuscript, Chris Spoor provided editorial assistance, and Martina Wojak prepared the final draft for publication.

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Summary

The federal government assists farmers in the United States through a complex system of agricultural programs. The programs offer direct payments to farmers; price supports for some commodities; subsidies for agricultural exports, insurance, and credit; and funding for research, education, and soil conservation activities. The programs financed through the Department of Agriculture's Commodity Credit Corporation (CCC) account for more than half of all federal spending for agriculture.

The New Spending Projections

The Congressional Budget Office (CBO) projects that CCC outlays will rise from \$8.9 billion in 1992 to \$9.7 billion in 1993, then fall during 1994 and 1995 before rising again to reach \$8.5 billion in 1997 (see Summary Table 1). Direct comparisons between actual outlays in 1991 and projected outlays in subsequent years are difficult because of changes in federal accounting procedures. Outlays relating to the export credit guarantee programs and those associated with administering the CCC programs are no longer included in the CCC's budgetary account. Summary Table 1 displays the actual outlays for 1991 adjusted for those procedural changes.

CCC outlays are directly affected by the laws governing U.S. farm programs, the choices the Administration makes in carrying out the programs, farmers' decisions to participate, and U.S. and world market conditions for supported commodities. The CBO baseline projections are built on the assumption that the current laws affecting the farm programs remain in effect over the projection period. This study describes a variety of other assumptions that underlie the baseline projections and reviews some of the factors, including uncertain international events, that could affect U.S. farm programs in the coming years.

International events affect the demand for exports of U.S. commodities. Although the demand for exports always presents uncertainty in projecting the costs of U.S. farm programs, unknowns surrounding global markets and international trade agreements may generate more uncertainty than usual. Changing political and economic conditions in the former Soviet Union and in Central and Eastern Europe are likely to affect the demand for exports of U.S. crops, particularly for grain crops supported by the government. Moreover, aid to the countries within those regions--in the form of donations or guaranteed credit for the purchase of U.S. commodities--could contribute to the demand for U.S. farm products.

Possible changes in world trading rules, stemming from the Uruguay Round of multilateral trade negotiations under the General

Summary Table 1.
Commodity Credit Corporation Outlays (By fiscal year, in millions of dollars)

	Actual 1991 ^a	Projected					
		1992	1993	1994	1995	1996	1997
Commodities							
Feed grains	2,722	2,379	3,994	3,642	2,323	2,969	2,899
Wheat	2,958	1,632	1,600	1,871	1,793	1,900	2,125
Rice	867	482	722	717	665	571	454
Upland cotton	382	1,440	846	646	707	731	775
Soybeans	40	88	-37	-45	-45	-43	-42
Dairy	839	341	421	366	354	320	348
Other ^b	-55	-39	40	15	-40	-36	-30
Subtotal	7,753	6,323	7,586	7,213	5,757	6,411	6,529
Other Outlays	866	2,542	2,071	1,987	1,962	1,958	1,985
Total	8,619	8,866	9,657	9,200	7,718	8,370	8,514

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

a. Outlays for the CCC reported by the Treasury for 1991 were \$9.94 billion. The adjusted figures shown in this table exclude outlays of \$686 million for the guaranteed export credit programs and \$633 million for administering the CCC programs. Beginning in 1992, the CCC budgetary account does not include those two categories of spending.

b. Includes peanuts, tobacco, honey, and sugar.

Agreement on Tariffs and Trade or from a North American Free Trade Agreement, present additional sources of uncertainty. Finally, agricultural policy reforms in the European Community--with or without a GATT agreement--could influence prospects for U.S. exports.

The Outlook for the Major Commodities

Comparing the baseline projections for 1992 and 1991, planting and production are expected to be higher for most of the major 1992 program crops (See Summary Table 2). Soybeans and cotton provide notable exceptions. The requirements for reducing acreage in the annual unpaid acreage reduction programs have been set at historically low rates; for the 1992 crops, they range from zero for rice and oats to 10 percent for upland cotton. (There is no acreage reduction program for soybeans.) Low requirements for reducing acreage have

been announced for most of the program crops. Analysts expect low requirements for future years because current and projected stocks are relatively low.

Low acreage reduction requirements do not imply that U.S. farmers are planting fencerow to fencerow. CBO projects that more than 35 million acres of cropland will be enrolled in the long-term Conservation Reserve Program (CRP) in 1992 and that about 20 million acres will be idled in annual programs. CBO expects that the 0/92 and 50/92 programs, which are essentially paid diversion programs, will account for about half of the latter amount. Capacity to expand production exists if it is needed.

In the 1991 crop year, use of the major grains and soybeans is expected to rise, but use of rice, cotton, and dairy products is expected to decline. In the 1992 crop year, use is projected to rise for all the major commodities save wheat and soybeans. Exports of wheat and soybeans in the 1992 crop year are expected to decrease after surging in the previous year. High levels of export subsidies and

Summary Table 2.
Major Supported Commodities (By crop year)

	1991	1992	1993	1994	1995	1996	1997
Corn (In millions of bushels)							
Production	7,474	8,481	8,495	8,575	8,723	8,917	9,213
Exports	1,560	1,661	1,733	1,804	1,873	1,953	2,046
Total Use	7,929	8,202	8,377	8,569	8,746	8,923	9,138
Ending Stocks	1,086	1,370	1,493	1,504	1,487	1,486	1,567
Price (Dollars per bushel)	2.44	2.27	2.22	2.26	2.31	2.33	2.33
Wheat (In millions of bushels)							
Production	1,981	2,400	2,380	2,403	2,386	2,512	2,594
Exports	1,226	1,148	1,189	1,230	1,266	1,302	1,358
Total Use	2,453	2,288	2,354	2,414	2,466	2,521	2,599
Ending Stocks	435	589	658	690	652	687	725
Price (Dollars per bushel)	2.99	3.15	2.95	2.90	3.00	2.98	2.91
Rice (In millions of cwt)							
Production	154.5	170.4	171.7	172.6	173.4	174.3	175.2
Exports	63.5	71.6	74.1	72.5	71.6	67.8	64.5
Total Use	158.5	170.7	177.2	179.8	182.9	183.2	183.7
Ending Stocks	25.8	31.2	31.8	31.3	29.3	28.7	29.2
Price (Dollars per cwt)	7.55	6.90	6.95	7.05	7.40	7.55	7.60
Upland Cotton (In millions of bales)							
Production	17.14	16.45	15.71	16.40	16.57	17.03	17.49
Exports	6.53	6.62	6.81	7.05	7.25	7.42	7.61
Total Use	15.72	15.77	16.04	16.41	16.74	17.13	17.56
Ending Stocks	3.99	4.88	4.76	4.95	4.98	5.08	5.21
Price (Dollars per pound) ^a	0.57	b	b	b	b	b	b
Soybeans (In millions of bushels)							
Production	1,986	1,945	1,980	2,015	2,035	2,060	2,093
Exports	662	636	634	643	654	668	687
Total Use	1,998	1,977	1,989	2,014	2,034	2,057	2,088
Ending Stocks	322	295	290	294	299	306	315
Price (Dollars per bushel)	5.52	5.57	5.61	5.65	5.77	5.85	5.89
Dairy Products (In billions of pounds)							
Production	148.7	150.0	152.4	155.0	157.4	159.7	161.6
Commercial Use	138.7	143.8	145.7	148.7	151.2	153.8	155.6
CCC Removals ^c	10.4	6.6	7.1	6.8	6.5	6.3	6.4
Price Support (Dollars per cwt)	10.10	10.10	10.10	10.10	10.10	10.10	10.10

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

NOTES: Cwt = hundredweight; CCC = Commodity Credit Corporation.

- a. Price for 1991 is the weighted average based on marketings during the first eight months of the crop year, not a projection for the entire crop year.
- b. Government agencies are prohibited from publishing price projections for cotton.
- c. Removals refer to net government purchases of dairy products (milk equivalents on the basis of milkfat content) for the purpose of supporting the farm price of milk.

export guarantees, especially for the republics of the former Soviet Union, contributed to the export demand for U.S. wheat in the 1991 crop year.

Corn

The yield for corn harvested in the 1991 crop year (beginning September 1991) averaged about 109 bushels per acre, well below the average of 118.5 bushels per acre in 1990. Below-normal rainfall in July over much of the Corn Belt reduced production in the 1991 crop year to 7.5 billion bushels--a 6 percent decline from the previous year. The yield for the 1991 crop, however, was still substantially above the drought-depressed yield of 84.6 bushels per acre in 1988.

Assuming normal weather conditions for the 1992 growing season, CBO projects a corn crop of 8.5 billion bushels, second only to the 1985 crop of 8.9 billion bushels. Total ending stocks (the total stocks remaining at the close of the crop year) are expected to decrease from 1.5 billion bushels for the 1990 crop year to 1.1 billion bushels for 1991, but are expected to increase for 1992. Although projected domestic use for the 1991 crop year is strong relative to earlier years, projected export demand is weak. Export sales to several major markets, including the former Soviet Union, are lagging in year-to-date comparisons.

The longer-term outlook for corn calls for an increase in ending stocks and an increase in exports. The farm price of corn, measured on a season-average basis, is expected to fall from \$2.44 per bushel in the 1991 crop year to \$2.27 per bushel in 1992 and \$2.22 in 1993. CBO projects a gradual rise in prices over the remaining baseline period, with the season-average farm price reaching \$2.33 in the 1997 crop year.

Wheat

Reduced yields and planted acreage, as well as higher exports, caused wheat prices to rise in the 1991 crop year (beginning June 1991). The farm price of wheat, measured on a season-average basis, fell from a drought-induced high of \$3.72 per bushel in the 1989 crop year to only \$2.61 per bushel in 1990. The current season-average price estimate for the 1991 crop year is \$2.99 per bushel. For the 1990 crop year, wheat farmers were required to take no more than 5 percent of their base acreage out of production to qualify for benefits under the federal wheat program, and provisions of the program allowed even smaller acreage reductions. For the 1991 crop year, farmers were required to remove 15 percent of their acreage from production in order to qualify for the federal program; for 1992, however, the acreage reduction requirement has been lowered to 5 percent.

The current baseline assumes that the acreage reduction requirement will remain at 5 percent through 1994 and fall to zero for 1996 and 1997. (The Secretary of Agriculture recently announced that the acreage requirement for the 1993 wheat crop would be set at zero.) Extremely low ending stocks are projected for the 1991 crop year, and they contribute to the relatively high price projection for 1992--\$3.15 per bushel. Over the 1993-1997 period, however, the projected season-average wheat price does not exceed \$3.00 per bushel.

Rice

The Secretary of Agriculture has announced significant cuts in the acreage reduction requirement for participants in the rice program--from 20 percent of base acreage for

the 1990 crop to 5 percent for the 1991 crop and to zero for the 1992 crop. For the remainder of the baseline period, the acreage reduction requirement is expected to remain at zero.

Despite a 75 percent cut in the 1991 requirement, plantings for the 1991 crop were slightly lower than those for 1990. Beginning with the 1991 crops, 15 percent of each producer's base acreage no longer qualifies for deficiency payments. Under the 1990 legislation, these so-called flexible acres can be planted in rice, other program crops, and certain nonprogram crops. Plantings for the 1991 crop dropped in spite of lower requirements for reducing acreage because many producers chose to plant other crops--mostly soybeans--on their unpaid flexible acres.

In addition, the use of the 50/92 program increased over the previous year. In that program, producers can receive deficiency payments on a portion of their land while retaining their crop acreage base, even if they do not plant rice. Water shortages in California also contributed to the reduction in 1991 plantings.

The longer-term outlook calls for a moderate increase in planted acreage. Plantings are projected at 3.1 million acres in each year beginning with the 1992 crop year, up from 2.9 million acres in 1991. Partly as a result of the loss of the Iraqi market, the demand for exports of U.S. rice has been depressed and is expected to remain so for several years, but domestic use is expected to strengthen. The price of rice, projected at \$7.55 per hundredweight during the 1991 crop year (measured on a season-average basis), is expected to drop below \$7.00 per hundredweight in 1992 and then rise through the end of the projection period.

Cotton

The near-term outlook for upland cotton is for plentiful supplies and weakening export de-

mand and prices. Domestic "mill-use demand" for cotton is expected to remain strong over the baseline period; but in the 1991 crop year (beginning August 1991), foreign demand is expected to fall. Foreign producers with abundant supplies have cut prices to boost sales.

Although strong demand caused stocks to fall in 1989 and 1990, they are expected to reach nearly 4 million bales at the end of the 1991 crop year and rise steadily over the remainder of the baseline period. As expected, higher production levels in the 1991 crop year have broken the price strength cotton has shown for several seasons. Strong foreign competition has contributed to the recent decline in prices.

Soybeans

Soybean production in 1991 was up 3 percent from a year earlier because of higher plantings and record yields. The increase in planted acreage was partly the result of the provisions for planting flexibility in the 1990 farm legislation and of spring rains that delayed corn plantings (especially in Iowa). Because of the provisions for flexibility, participants in the programs for the other supported commodities now have an incentive to plant the crop with the greatest expected market return on 15 percent of their crop acreage base. For the 1991 crop year, soybeans presented a profitable alternative for some producers, but increases in production put downward pressure on soybean prices. A 5 percent decline in the season-average soybean price is projected for the 1991 crop year, and a modest decrease in plantings is expected for the 1992 crop.

The longer-term outlook for soybeans calls for a rebound in plantings from the 1992 acreage projection of 58.6 million acres. Over the 1993-1997 projection period, increases in demand are expected to keep pace with increases

in supply. The season-average soybean price is expected to rise by 6 percent over the 1992-1997 period and to remain well above the non-recourse loan rate of \$5.02 in each year.

Dairy Products

The government's support price for dairy products is projected to remain at the new legislative minimum of \$10.10 per hundredweight through 1997. Outlays for the 1991 dairy program reached \$839 million, up 66 percent from the relatively low outlays for the 1990 program. Outlays for 1992 are projected at \$341 million, with demand expanding more than production and CCC purchases declining.

Direct comparisons between outlays are difficult, however, because some of the decline in CCC purchases is attributable to a shift in accounts. Although still counting them as net removals, the Department of Agriculture's Food and Nutrition Service has started purchasing dairy products under its own budgetary account. Prices farmers received, after reaching a record level of \$13.78 per hundredweight in 1990, fell to \$12.24 per hundredweight in 1991 and are expected to remain at

or below \$12.25 during the 1992-1997 projection period.

Land Use

Overall, planted acreage for the major supported crops is expected to rise to 245 million acres in 1992--up 8 million acres from the previous year. The largest increase is expected in wheat--up by more than 5 million acres. Land idled under annual programs in 1992 is expected to fall in all crops except cotton, with total acreage declining by more than 9 million acres. The total planted acreage for the major program crops is expected to remain relatively constant through 1995, then rise in 1996 and 1997 as long-term contracts for acreage in the Conservation Reserve Program begin to expire.

By 1995, enrollment in the CRP is expected to reach nearly 40 million acres. CBO projects that, to accommodate the additional enrollment, the Secretary of Agriculture will reduce acreage reduction requirements; as a result, land idled under the annual programs is expected to fall during most years of the projection period.

The Congressional Budget Office Baseline for Commodity Credit Corporation Outlays

The agricultural programs of the federal government offer direct payments to farmers; support the prices of some crops; subsidize insurance, credit, and exports; and fund research, education, and soil conservation activities. The programs financed through the Commodity Credit Corporation (CCC) of the Department of Agriculture (USDA) account for a large proportion of all federal support to farmers. In the 1992-1997 baseline projections of the Congressional Budget Office (CBO), CCC outlays constitute the majority of all federal spending for agriculture.

CCC programs are complex. For most of the major crops, such as wheat and corn, participating producers must agree to idle a portion of their land in exchange for direct government payments. Acreage reduction requirements reduce supplies and thus raise prices. Other programs included in the CCC budgetary account add to the demand for agricultural products, thereby raising prices or allowing the sale of more products at given prices. Some of those programs promote exports by means of subsidies (the Export Enhancement Program) or by developing overseas markets for farm products (the Market Promotion Program). Also included are direct government purchases and the nonrecourse loan programs that keep market prices at or above specified support levels. Definitions of special terms associated with the farm programs can be found in the Glossary.

Some federal programs support prices or promote exports but are accounted for sepa-

rately in the federal budget. The Conservation Reserve Program (CRP) supports prices. The program pays farmers not to produce crops on acreage that is environmentally fragile. The Export Credit Guarantee Program promotes U.S. agricultural exports.

According to the CBO baseline, projected CCC outlays will rise from \$8.9 billion in 1992 to \$9.7 billion in 1993, then fall during 1994 and 1995 before rising again to reach \$8.5 billion in 1997. The pattern of projected outlays results mostly from a change in the calculation of deficiency payments that begins with the 1994 crops. Table 1 contains additional details about CCC outlays during this period.

It is difficult to make direct comparisons between the projected outlays for 1992 through 1997 and actual CCC outlays in 1991 because the projected outlays reflect two significant changes in federal accounting. First, the Federal Credit Reform Act of 1990 changed the accounting for outlays associated with the export credit guarantee programs; the Budget Enforcement Act of 1990 mandated the change. Under the current law, outlays relating to the credit guarantee programs are no longer included with the CCC programs.¹ Second, the cost of administering the CCC programs is no longer included in the CCC account. The cost is accounted for sepa-

1. The costs associated with export credit guarantees issued before 1992 are now carried in a separate liquidating account (measured on a cash flow basis); the costs associated with guarantees issued in 1992 and in later years are carried in a separate subsidy account (measured on a net present-value basis).

rately because it is now classified as a discretionary expenditure. Table 1 displays the total outlays for 1991 adjusted for those accounting differences.

The baseline projections of outlays for CCC programs presented in this report assume that the current laws governing commodity programs will remain in effect through 1997. However, these laws may change in coming years. Current farm legislation expires with the 1995 crop year, and the Congress will write a new farm bill during 1995. Laws could be amended at other times. During the next several years, for example, the farm law could be affected by legislation carrying out an agreement reached in the Uruguay Round of multilateral trade negotiations under the General Agreement on Tariffs and Trade (GATT) or by the negotiations for a North

American Free Trade Agreement. Largely because of this policy uncertainty, but also because projections assume normal weather conditions, the baseline should be viewed not as a forecast of outlays for each year over the period but as a yardstick that the Congress can use to measure the effects of proposed changes in policy.

Although existing farm law determines eligibility and benefit levels, actual CCC outlays rise or fall from year to year depending on how the Department of Agriculture administers the law, supply and demand in commodity markets, and farmers' participation in the programs. This report provides detailed information on CBO's assumptions concerning program administration and market conditions used in constructing the five-year budget baseline. The report also reviews some of the

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	Actual 1991 ^a	Projected					
		1992	1993	1994	1995	1996	1997
Commodity							
Feed grains	2,722	2,379	3,994	3,642	2,323	2,969	2,899
Wheat	2,958	1,632	1,600	1,871	1,793	1,900	2,125
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Upland cotton	382	1,440	846	646	707	731	775
Soybeans	40	88	-37	-45	-45	-43	-42
Peanuts	48	-16	-6	-6	-6	-6	-6
Tobacco	-143	-86	20	0	-43	-28	-27
Honey	19	11	6	6	2	-3	-2
Sugar	-20	-26	-27	-28	-28	-29	-29
Dairy	839	341	421	366	354	320	348
Other commodities	41	78	47	43	35	30	34
Subtotal	7,753	6,323	7,586	7,213	5,757	6,411	6,529
Noncommodity							
Disaster payments	108	1,021	0	0	0	0	0
Export programs	39	757	1,287	1,144	1,090	1,038	988
Other noncommodity	-26	134	142	147	152	158	164
Net interest	745	630	643	696	720	762	833
Subtotal	866	2,542	2,071	1,987	1,962	1,958	1,985
Total	8,619	8,866	9,657	9,200	7,718	8,370	8,514

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

a. Outlays for the CCC reported by the Treasury for 1991 were \$9.94 billion. The adjusted figures shown in this table exclude outlays of \$686 million for the guaranteed export credit programs and \$633 million for administering the CCC programs. Beginning in 1992, the CCC budgetary account does not include those two categories of spending.

factors, including uncertain international events, that could affect U.S. farm programs in the coming years.

International Events and the Baseline Assumptions

International events affect U.S. farmers and farm program costs most directly through the demand for U.S. commodities. The demand for exports is always a major source of uncertainty in projecting costs of farm programs. In terms of value, the United States exports 20 percent to 25 percent of its domestic agricultural production; about \$40 billion in agricultural exports is expected this year. For commodities supported by farm programs, the percentages exported are often higher--more than half of the wheat crop is shipped abroad in many years.

The demand for exports may be especially uncertain in this year's projection because of the dissolution of the Soviet Union and the economic and political reorganization of Central and Eastern European countries. Changing conditions there are likely to affect the export demand for U.S. crops. Moreover, aid to nations in those regions--in the form of donations or guaranteed credit for the purchase of U.S. commodities--could contribute to the demand for U.S. farm products.

A second source of uncertainty is a possible change in world trading rules stemming from the Uruguay Round of multilateral trade negotiations under the GATT or the possible formation of a North American free-trade area. Agricultural policy reforms in the European Community (EC)--with or without a GATT agreement--could also influence prospects for U.S. exports.

Recent Developments in the Former Soviet Union

Following a year of rapid change, the region constituting the former Soviet Union is in a state of political and economic turmoil. In 1991, key political events included an attempted coup, the demise of the Communist Party, a change of top leadership, and the formal dissolution of the Soviet Union. The former Soviet republics now confront inflation, the near worthlessness of the ruble, a sharp decline in real output, hoarding and other distribution problems, lack of domestic credit and production inputs, and a large foreign debt.

In recent months, leaders of the former Soviet republics have introduced to their economies some elements of free-market capitalism. In Russia, the privatization of the farm sector is proceeding but is still in its infancy. There were about 50,000 family farms in Russia at the beginning of 1992. That number nearly doubled in the first three months of the year.² Yet only about 3 percent of farm land is in private hands in Russia. Although privatization may be the key to greater agricultural productivity over the long term, the perilous economic conditions and the lack of credit, inputs, and infrastructure will make it difficult for private farmers to succeed in the near term. State-owned and collective farms will be facing difficulties as well.

Historically, the region constituting the former Soviet Union has represented an im-

2. See Department of Agriculture, Economic Research Service, *Former USSR Agriculture and Trade Report* (May 1992), for a discussion of privatization of farms in the former Soviet republics as well as other aspects of their agricultural situation. Also see Congressional Research Service, *U.S. Agricultural Assistance to the Former Soviet Union: Policy Issues* (May 4, 1992), for a comprehensive discussion of U.S. assistance.

portant market for U.S. agricultural exports, particularly wheat and coarse grains. In the short term, market disruptions and shortages in foreign exchange will cause a drop in unsubsidized agricultural exports, but the volume of exports donated or assisted with guaranteed credit and subsidized prices will rise. Over the longer term, uncertainty prevails regarding the potential effect of economic and political reforms in the former Soviet republics on export demand for U.S. agricultural products.

The former Soviet republics are receiving various types of food and agricultural aid from a number of countries, including the United States. The bulk of U.S. aid has been in the form of export credit guarantees. From January 1991 through April 1992, the former Soviet republics used a total of \$3.75 billion in export credit guarantees of the USDA. The guarantees cover 100 percent of the principal amount and an interest rate that equals the yield of the 52-week average for U.S. Treasury bill auctions. The President also announced the award of \$165 million in humanitarian food aid and some technical assistance. In April 1992, the Administration announced that \$1.1 billion in new export credits would be made available to the former Soviet republics: \$600 million in credit guarantees to Russia beginning in May 1992; and up to \$500 million to the other former republics, subject to creditworthiness and other program criteria.

Thus far, wheat and feed grains have accounted for the lion's share of the 1991 and 1992 allocations of export credit guarantees to the former Soviet republics. In response to their desire for food products, the proportion used for wheat has risen during this period. Between October 1991 and April 1992, wheat accounted for almost 40 percent of the guarantees; during fiscal year 1991, however, the figure was less than 15 percent. Feed grains, soybeans, and protein meals account for most of the rest. (About 10 percent of the guaranteed credit has paid for shipping.)

Export credit guarantees covered more than 80 percent of the \$1.8 billion total shipped to the former Soviet republics in fiscal year 1991.³ The current CBO baseline assumes a total allocation of \$2.5 billion in export credit guarantees to the former Soviet republics in each year of the baseline period.⁴

Political and Economic Changes in Central and Eastern Europe

The late 1980s saw dramatic political and economic change in the Central and East European countries (the CEEs--Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Rumania, and Yugoslavia). One by one, the Communist regimes of these countries have been dismantled. Their experiences have varied--from an abrupt revolution in Rumania and a continuing civil war in what was Yugoslavia to relatively peaceful transitions in Poland and Hungary.

Each of the CEEs now faces the challenge of transforming its economic structure. From an agricultural perspective, land reforms, price liberalization, and the adoption of technology loom as important transitional issues. Movements toward privatization and market-based agricultural production are evident in Albania, Bulgaria, Czechoslovakia, Hungary, Poland, and Rumania; in all of these countries, laws addressing land ownership, land tenancy, and property rights have been introduced. Policies to liberalize prices vary by country and by commodity, with many of the new governments moving to liberalize prices in the farm and food sectors.

The availability of credit guarantees and food aid, principally the P.L. 480 program, will largely determine the demand for U.S. ex-

3. Department of Agriculture, *Outlook for U.S. Agricultural Exports* (February 27, 1992), p. 9.

4. If the \$1.1 billion in new credit guarantees announced in April 1992 is used before the end of 1992, the total for that year would exceed the total assumed in the baseline by \$400 million.

ports in Central and Eastern Europe. On balance, 1992 harvests in those regions are expected to improve over 1991 levels. But countries such as Rumania that face serious shortfalls in domestic production and foreign currency will require financial assistance. Thus, recent developments in the CEEs could lead in the near term to a decrease in unsubsidized exports and an increase in requirements for credit guarantees and food aid. The current CBO baseline assumes a total allocation of export credit guarantees to the CEEs of \$200 million in each year of the baseline period.

The potential long-term effects of political and economic changes in the CEEs are uncertain. These countries are not now key traders in world grain markets. But improved technology and management practices could substantially increase their productivity. In addition, because they are well positioned to trade with the European Community, the former Soviet Union, and the Middle East, CEE farmers could eventually compete with those of the United States for markets.⁵

The General Agreement on Tariffs and Trade and Agricultural Trade Reform

Successful conclusion of the Uruguay Round of negotiations under the GATT could necessitate changes in U.S. farm programs. If an agreement is reached and the Congress enacts implementing legislation, the operation and cost of U.S. farm programs would almost certainly be affected. Continued slow progress or a breakdown in the negotiations could also affect those programs. In addition to changes required by law, the Administration has the discretion to increase subsidies of exports and guarantees of credit if it feels that such a

strategy would improve the chances for a successful negotiation.

The Dunkel Text. On December 20, 1991, Arthur Dunkel, Director-General of the GATT, released a "draft final" multilateral trade agreement--commonly referred to as the Dunkel text. If that text forms the basis for a GATT agreement, some adjustments in U.S. farm programs would be necessary.

The text establishes specific requirements in three areas: export subsidies, market access, and internal supports.⁶ As written, the requirements would be carried out over a six-year period beginning in 1993. They stipulate that:

- o Direct export subsidy payments would be reduced by 36 percent, and the volume of subsidized exports would be reduced by 24 percent. The reductions would be measured from a 1986-1990 base period.
- o Import tariffs would be subject to a 36 percent average reduction, with a minimum reduction of 15 percent for each tariff line. The average and line reductions would be measured from a 1986-1988 base period.
- o Nontariff barriers would be converted to tariffs--a process known as tariffication--and reduced in accordance with the 36 percent and 15 percent tariff reduction rules. For products subject to tariffication, minimum access commitments at zero, or very low tariffs, would be established at 3 percent of domestic consumption in the 1986-1988 base period and expanded thereafter to 5 percent.

5. See Department of Agriculture, Economic Research Service, *Agricultural Outlook* (November 1991 and December 1991), for discussions of agriculture in the CEEs. Three countries--Czechoslovakia, Hungary, and Poland--have concluded bilateral "association agree-

ments" with the European Community, and they could lead to membership in that organization.

6. The Dunkel text also proposes the adoption of "science-based" sanitary and phytosanitary trade regulations, but it does not establish specific disciplines.

- o Internal subsidies that distort trade would be reduced by 20 percent, measured by an "aggregate measure of support" and a 1986-1988 base period.⁷

In March 1992, the USDA and the Food and Agricultural Policy Research Institute released independent analyses of the Dunkel text.⁸ Comparing the projected economic effects of the Dunkel text to baseline projections without the agreement, the studies used projected 1998 agricultural indicators--exports, income, and government payments--as the basis for their comparisons. Overall, both studies found that U.S. agricultural exports would increase, as would market receipts and production costs of U.S. farmers.⁹ Government payments would drop and, with no reallocation of payment savings to agriculture, net farm income would rise. Although the studies reported consistent trends in the broad economic effects of the Dunkel text, major uncertainties remain regarding their size and the effect of such an agreement on specific commodities.

The GATT Trigger. The Omnibus Budget Reconciliation Act of 1990 establishes the "GATT trigger," a two-tier policy mechanism. If the United States does not enter into a GATT agreement by June 30, 1992, and if the lack of an agreement cannot be traced to a deficiency in fast-track procedures, the first tier of the mechanism will be activated.¹⁰ That tier involves three program adjustments:

- o The Secretary of Agriculture must budget \$1 billion in addition to current re-

quirements for export promotion programs over the 1994-1995 period.¹¹

- o The Secretary must establish marketing loan programs for wheat and feed grain crops harvested in 1993 through 1995.
- o The Secretary may waive the minimum acreage reduction requirements for 1993 through 1995 for any of the program crops.

If a GATT agreement has not been "entered into force" by June 30, 1993, the second tier will be activated. Under its terms, the Secretary must consider waiving reductions in agricultural spending that the budget act requires, increasing the level of funds available for export programs, and establishing a marketing loan program for the wheat and feed grain crops harvested in 1993 through 1995.

The current CBO baseline--made final before the first GATT trigger date--does not reflect the first tier of the trigger mechanism; and, in keeping with the baseline convention, the projections do not assume the passage of any future legislation.

Agricultural Policy Reforms in the European Community

The Common Agricultural Policy (CAP) of the EC supports its members' agricultural production through a complex system of intervention prices, export subsidies, import levies, and production quotas. The CAP budget is large

7. Testimony of Richard T. Crowder, Under Secretary, International Affairs and Commodity Programs, USDA, before the House Committee on Agriculture, January 9, 1992.

8. Department of Agriculture, Office of Economics, "Preliminary Analysis of the Economic Implications of the Dunkel Text for American Agriculture" (March 1992); and Food and Agricultural Policy Research Institute, "Implications of a GATT Agreement for World Commodity Markets, 1993-98: An Analysis of the Dunkel Text on Agriculture" (draft copy, FAPRI, Ames, Iowa, and Columbia, Missouri, March 30, 1992).

9. Although U.S. agricultural exports were expected to increase overall, both studies reported differences in results according to sector. For example, net dairy imports were expected to increase.

10. Because fast-track procedures require a 90-day notification period, the first tier was effectively triggered on March 31, 1992, 90 days before the June 30 deadline.

11. In accordance with the Omnibus Budget Reconciliation Act of 1990, the additional \$1 billion can be applied to any of the export promotion programs over the period beginning October 1, 1993, and ending September 30, 1995.

and growing. In calendar year 1990, actual expenditures under the guarantee section of the CAP reached ECU 26.5 billion. That figure increased to an estimated ECU 31.5 billion in 1991, and it is expected to reach ECU 35 billion in 1992.¹² The 1991 expenditure equals nearly \$40 billion, which is almost four times the outlays reported for the Commodity Credit Corporation that year.

In response to a variety of economic and political concerns, the burdensome and escalating cost of the CAP among them, the farm ministers of the EC have introduced short- to medium-term policies to control supplies and have negotiated a more drastic proposal for long-term reforms. In 1988, the EC implemented a five year set-aside program. The program has had little or no significant effect on the EC's production and output, however. It elicited a set-aside of only 4.7 million arable acres, roughly 3 percent of the EC's total.¹³ In the 1991-1992 marketing year, the EC adopted a one-year supplemental set-aside program for cereals, oilseeds, and pulses. In May 1992, the EC's agricultural commission announced an agreement on farm policy reform that would reduce price guarantees on cereal crops and compensate farmers subject to set-aside requirements.

If the EC implements policy reforms that successfully reduce supplies, the costs to operate farm programs in the United States could decline. The outcome would depend in part on the Administration's response to the decline in EC production. For example, adjustments in acreage reduction requirements could dampen

the effect of a reduction in EC output. Because the future of policy reform in the EC remains uncertain, however, the current CBO baseline assumes that the CAP will stay unchanged through 1997.

U.S.-Mexican Trade and the North American Free Trade Agreement

A trilateral North American Free Trade Agreement (NAFTA), involving the United States, Mexico, and Canada, could complement and extend the bilateral U.S.-Canadian Free Trade Agreement currently in effect. In 1991, Mexico was (after Japan and Canada) the third largest market for U.S. agricultural exports. The creation of a trilateral trading area could influence U.S. agricultural exports and imports, farm programs, and CCC outlays. Corn is among the CCC-supported commodities that could be affected. Although a NAFTA could have an impact on seasonal fresh fruit and vegetable markets, it would have no direct effect on CCC outlays because those crops are not directly supported by government programs. However, tariff rates and tariff revenues could change.

In recent years, as part of a broader program of economic reform, Mexico has reduced or eliminated barriers and internal supports for many agricultural commodities. A small group of commodities deemed sensitive remains under government protection.

The market for corn, which is among the most important and most protected agricultural commodities in the Mexican economy, is controlled through guaranteed prices and requirements for import licensing.¹⁴ A NAFTA could lead to, or perhaps hasten, liberalization in the corn market. It is expected, however, that any adjustments in the Mexican corn

12. Commission of the European Communities, *XXV General Report on the Activities of the European Communities 1991* (Luxembourg: Office for the Official Publications of the European Communities, 1992); Commission of the European Communities, *XXIV General Report on the Activities of the European Communities 1990* (Luxembourg: Office for the Official Publications of the European Communities, 1991); unpublished European Commission memo (February 12, 1992); and Congressional Budget Office communication with the Washington, D.C., delegation of the European Commission, April 23, 1992.

13. Department of Agriculture, Economic Research Service, *Agricultural Outlook* (November 1991), p. 19.

14. Santiago Levy and Sweder Van Wijnbergen, "Transition Problems in Economic Reform: Agriculture in the Mexico-U.S. Free Trade Agreement," in *Economy-*

market would occur over a period of several years. In the long term, U.S. corn shipments to Mexico could increase and U.S. program spending related to corn could decrease. An increase in the export demand for U.S. corn could cause a net reduction in payments to U.S. farmers--mostly as a result of higher market prices and lower deficiency payments. If the Secretary of Agriculture relaxes the acreage reduction requirement, however, an increase in corn acreage could reduce or eliminate those potential savings.

The current CBO baseline does not reflect any future changes in Mexican policy, whether unilateral or based on a NAFTA; and, in keeping with the conventions of the CBO baseline, no future legislation is assumed for the United States.

Price and Income Support Mechanisms

The CBO baseline for CCC spending assumes that current U.S. farm policies remain in force through the 1997 crop year. That approach requires that CBO make specific assumptions about the mechanisms supporting farm incomes and market prices--target prices and deficiency payments, nonrecourse and marketing loans, government purchases, provisions for acreage management, stocks the federal government owns and finances, and activities to promote exports. The CBO baseline assumptions that pertain to these mechanisms are described below.

14. Continued

Wide Modeling of the Economic Implications of a FTA with Mexico and a NAFTA with Canada and Mexico (International Trade Commission, February 1992); E. Wesley F. Peterson, "The Implications of a Free Trade Agreement with Mexico for U.S. Grain and Oilseed Exports," in *North American Free Trade Agreement, Effects on Agriculture*, vol. 3, *Grain, Oilseeds and Cotton Issues* (Park Ridge, Illinois: American Farm Bureau Federation, 1991).

Target Prices and Deficiency Payments

Deficiency payments are direct federal payments to producers participating in CCC programs for corn and other feed grains, wheat, rice, and cotton. The payments are generally calculated as the difference between a crop's target price (specified in the law) and the higher of the market price or the nonrecourse loan rate; they are calculated on the basis of the producer's program yield multiplied by the number of acres of the crop that are eligible for payments (see Box 1). Program yield is set for each farm, based on an average of past yields. Deficiency payments are direct income supplements. CCC programs normally require that some land be taken out of production without payment; thus, a portion of deficiency payments can be regarded as compensation for agreeing to reduce production.

Target prices directly influence outlays through their effect on deficiency payments. The 1990 farm bill sets target prices for the 1991-1995 crop years at the levels in effect for the 1990 crops (see Table 2). The CBO baseline extends the target prices set in the 1990 farm bill to include the 1996 and 1997 crop years.

Nonrecourse and Marketing Loans

The CCC administers the nonrecourse loan program and the marketing loan program. Nonrecourse loans are available for all of the principal program commodities--feed grains, wheat, cotton, and rice--as well as for soybeans, other oilseeds, tobacco, honey, and sugar. The 1990 farm bill contains marketing loan programs for rice, cotton, and oilseeds.¹⁵

Nonrecourse Loans. Participating producers can pledge all or part of their crop as col-

15. The Omnibus Budget Reconciliation Act of 1990 places a 2 percent origination fee on all oilseed loans.

lateral for a CCC loan. The loan can be repaid in cash or, at the producer's option, can be satisfied by forfeiting the crop to the CCC. For the market prices of wheat and feed grains, nonrecourse loans provide a minimum level of support; the commodity can be forfeited to satisfy the loan even if its market price falls below the nonrecourse loan rate. For cotton, rice, and oilseeds, which have marketing loan programs, the nonrecourse loan rate does not serve as a floor on the market price.

The amount of the loan a producer receives is calculated by multiplying the loan rate by the amount of the crop pledged as collateral. The loan rate, expressed in dollars per bushel or pound, is set annually according to formulas specified in the law. The Secretary of Agriculture has some discretion to adjust the loan rate on wheat and feed grains. Table 2 shows the nonrecourse loan rates the baseline assumes for the five major crops.

Marketing Loans. Marketing loans allow farmers who grow rice, cotton, and oilseeds to repay their nonrecourse loans at an adjusted market price, rather than at the loan rate. For example, if a producer were to take a loan for soybeans at \$5.02 per bushel in 1993, and the adjusted market price was only \$4.50 per bushel, the soybean producer could repay the loan at the lower figure. Producers choosing not to place their crop in the loan program can receive a loan deficiency payment--a cash payment equivalent to the benefit they would have received by placing their crop under loan.

Government Purchases

Direct government purchases also support market prices, most notably in the case of dairy products. At the support price, when the supply of storable dairy products (butter,

Box 1. Calculating Deficiency Payments

Deficiency payments are direct federal payments that generally make up the difference between target prices, which are specified in the law, and market prices. Because the latter are national averages, a producer's local market price plus the deficiency payment rate can be more or less than the target price. Using average prices rather than those the individual farmer receives preserves individual incentives to market the crop for the highest possible price.

Calculating deficiency payments involves program production rather than actual production. Program production is calculated by multiplying the program yield by payment acres. Payment acres are those on which participants in the annual commodity programs are eligible to receive deficiency payments. Program yield is based on historical yields and does not change with current production; deficiency payments to an individual are not affected by variations in production owing to poor weather, the use of fertilizers, or other production factors that enhance crop yields.

Deficiency payments for feed grains, wheat, and rice are calculated as the product of program production and the difference between the target price and the higher of two figures: the average market price during the first five months of the crop year,

and the basic (unadjusted) nonrecourse loan rate. In wheat, for example, the 1992 crop target price is \$4.00 per bushel, and the basic loan rate is \$2.58 per bushel. (Loan rates for wheat and feed grain can be adjusted downward at the discretion of the Secretary of Agriculture.) The regular deficiency payment rate could be as high as \$1.42 per bushel--the difference between the target price and the basic loan rate--if the average market price for the first five months of the crop year is below the basic loan rate. The regular deficiency payment is subject to a payment limitation of \$50,000 per person. An additional payment could be made if the five-month average market price falls below the basic loan rate. During the baseline period, however, the wheat price is expected to remain well above the basic loan rate. For crop years 1994 and 1995, the average price over the entire crop year will be used to calculate deficiency payments.

Cotton deficiency payments are based on the difference between the target price and the higher of the calendar-year market price and the nonrecourse loan rate. Those payments, but not the benefits of the cotton and rice marketing loan programs, are subject to the payment limitation of \$50,000 per person. Benefits received under the cotton and rice marketing loan programs, however, are subject to a \$75,000 payment limit.

cheese, and nonfat dry milk) exceeds commercial demand, direct government purchases are used to absorb the surplus. The support price can be adjusted annually, depending on projections of government purchases of surplus milk. The CBO baseline assumes that a support price of \$10.10 per hundredweight will be in effect through 1997.

Acreage Management Provisions

The Department of Agriculture administers several programs that affect farm prices and

farm income by reducing planted acreage or increasing management flexibility: the annual unpaid acreage reduction programs, the Conservation Reserve Program (CRP), and several programs to promote planting flexibility.

Acreage Reduction Programs. Typically, participants in the commodity programs must reduce their planting by idling some portion of their crop acreage base; annual unpaid acreage reduction programs reduce production and thereby raise market prices. Generally, a cover crop must be planted on land that is idled under an acreage reduction program.

Table 2.
Program Assumptions in the CBO Baseline for the Commodity Credit Corporation (By crop year)

	1992	1993	1994	1995	1996	1997
Target Prices (Dollars per bushel, except as noted)						
Corn	2.75	2.75	2.75	2.75	2.75	2.75
Wheat	4.00	4.00	4.00	4.00	4.00	4.00
Rice ^a	10.71	10.71	10.71	10.71	10.71	10.71
Cotton ^b	0.729	0.729	0.729	0.729	0.729	0.729
Nonrecourse Loan Rates (Dollars per bushel, except as noted)						
Corn	1.72	1.72	1.68	1.65	1.66	1.66
Wheat	2.21	2.39	2.27	2.16	2.17	2.17
Rice ^a	6.50	6.50	6.50	6.50	6.50	6.50
Cotton ^b	0.524	0.539	0.534	0.536	0.517	0.512
Soybeans	5.02	5.02	5.02	5.02	5.02	5.02
Acreage Reduction Requirements (Percentage of base acreage)						
Feed Grains ^c	5.0	5.0	5.0	5.0	5.0	5.0
Wheat	5.0	5.0	5.0	5.0	0.0	0.0
Rice	0	0	0	0	0	0
Cotton	10.0	17.5	15.0	15.0	15.0	15.0

SOURCE: February 1992 projections of the Congressional Budget Office.

a. In dollars per hundredweight.

b. In dollars per pound.

c. Baseline assumption for the acreage reduction program for corn, grain sorghum, and barley. The 1990 farm bill does not permit an acreage reduction program for oats.

That land can be used for grazing or growing hay under restrictions set by State Agricultural Stabilization and Conservation Service committees. The amount of land subject to acreage reduction programs is determined each year. The specific level assumed for each crop is shown in Table 2.

The Conservation Reserve Program. The Conservation Reserve Program pursues goals for resource conservation through long-term retirement of land and also has effects on production that resemble those of its annual counterparts. The federal budget accounts for the CRP separately from the CCC. The 1990 farm bill extends the requirement, first stated in the 1985 farm bill, that a minimum of 40 million acres of highly erodible land be placed in the long-term CRP. The 1990 farm bill extends the requirement until 1995 and broadens the definition of eligible land to include shelter belts, windbreaks, marginal pasture land planted to trees, wetlands, and other environmentally sensitive land. Under the 1985 farm bill, land in the CRP was removed from production for 10 years and could be used to plant an approved soil-conserving crop. The 1990 bill allows contract lengths of 10 to 15 years for land devoted to a soil-conserving crop and longer periods for land devoted to trees. Farmers offer to enroll land in the reserve in return for a rental payment. The Department of Agriculture decides which land to accept based on budget constraints and local rental markets.

Current enrollment in the program is 34.4 million acres. The CBO baseline assumes that 40 million acres will be enrolled by 1995 and that the CRP contracts entered into in 1986 and 1987 will not be renewed 10 years later. CBO projects that 2 million acres will leave the CRP in 1996 and an additional 13.7 million acres in 1997; less than 25 million acres will remain.

Some of the land enrolled in the CRP was formerly crop acreage base that would have been planted in a program crop and been eligible for deficiency payments and other program benefits. Having this land out of production

would raise crop prices and reduce deficiency payments if other aspects of the programs were unchanged. However, requirements for acreage reduction are undoubtedly far lower than they would be without the CRP. As it is, government costs are increased to the extent that paid retirement of land in the CRP substitutes for the unpaid land idled to satisfy requirements for reducing acreage.

Planting Flexibility Programs. The planting flexibility provisions of the farm law reduce deficiency payments--excluding 15 percent of the participant's base acreage from payment eligibility--but increase farmers' discretion over planting decisions. Program participants can plant the original program crop, a different program crop, or an approved alternative on "normal flexible" acres (those ineligible for deficiency payments) and still retain credit for the entire acreage base. Such credit is needed to qualify for program benefits in future years. Under the previous law, producers could lose credit for their crop acreage base if they failed to plant the original program crop on their entire base less the acreage idled to comply with an acreage reduction requirement.

Participants can plant as much as another 10 percent of their base acreage in certain crops other than the original program crop without losing base credit; however, they lose deficiency payments on this "optional flexible" acreage if they choose to plant a different crop. Several additional provisions in the 1990 farm bill--including 0/92 and 50/92--contribute to planting flexibility. Brief descriptions of those provisions can be found in the Glossary.

According to enrollment reports issued by the USDA, the flexibility provisions did not elicit major changes in planting decisions in 1991. From a total of 20 million normal flexible acres and 13 million optional flexible acres, only 7.5 million acres were shifted out of the original program crops. Approximately 1.9 million acres were moved to other program crops and, of the acres moved to nonprogram crops, 75 percent went to soybeans. However, these flexibility provisions are relatively new,

so their full effects have not yet been observed.¹⁶

Stocks Owned and Financed by the Federal Government

The government holds stocks of agricultural commodities as part of the regular CCC program. It acquires them through purchases of dairy products or forfeitures of nonrecourse loans and disposes of them through donations, cash sales, or exchanges for generic commodity certificates. The USDA is required to hold 147 million bushels of wheat in the Food Security Wheat Reserve if sufficient government stocks are available or if funds have been appropriated to purchase grain. Aside from those required reserves, government-owned stocks of grain are relatively low. Droughts during the 1988 and 1989 seasons allowed large reductions in government-held stocks. The CBO baseline projects that wheat stocks the CCC holds will fall to 150 million bushels by the close of the 1991 crop year. Total "ending stocks" of wheat for the 1991 crop year are projected at 435 million bushels, down from 866 million bushels for the previous year. (The total ending stocks are the total stocks remaining at the close of the crop year.)

In the past, the CCC has also encouraged farmers to hold stocks by paying them to store wheat and feed grains in the Farmer-Owned Reserve (FOR) program. The Secretary of Agriculture must allow grain to enter the reserve if total stocks exceed trigger levels set in the law and if prices fall below specified levels. The Secretary may open the reserve if either the stock trigger or the price trigger is tripped. The current CBO baseline assumes that the FOR will not be open during the 1992-1997 period and that stocks in the FOR will fall to zero in 1993.

16. The 1990 legislation allowed 1991 producers of winter wheat to avoid the reduction in payment acres if they chose to have their deficiency payments based on the season-average price for wheat instead of the price during the first five months of the marketing year. That option does not extend to the 1992 crop.

Export Promotion Programs

The CCC administers the Export Enhancement, Export Credit Guarantee, and Market Promotion programs. Each has a direct budgetary cost that, in some cases, can be offset by the effects of higher exports and prices. The federal budget accounts for the Export Credit Guarantee Program separately from the CCC.

The Export Enhancement Program. The EEP subsidizes exports of U.S. agricultural commodities. The program is intended to increase the competitiveness of U.S. agricultural exports in targeted foreign markets and to counter the effects of unfair trading practices. In 1991, wheat accounted for 84 percent of the EEP bonuses issued to U.S. exporters. The 1990 farm bill sets a goal of using a minimum of 25 percent of the EEP each year to promote high-value and value-added agricultural exports. The USDA is not expected to meet that goal during the projection period; the CBO baseline assumes that 15 percent of EEP subsidies go to promote high-value and value-added products. (High-value agricultural commodities include table eggs, fresh fruits, and fresh vegetables; they are relatively expensive on a per-unit or per-volume basis. Value-added agricultural products include flour, barley malt, and vegetable oil.)

The current farm law requires that at least \$500 million be made available each year to carry out the EEP. Generic commodity certificates have been used to make subsidy payments in the past, but because of low levels of government-owned stocks, the USDA announced that EEP bonuses to exporters would be awarded in cash beginning in November 1991. The current CBO baseline assumes that the EEP is operated as a cash-only program.

EEP bonuses to U.S. exporters totaled an estimated \$917 million in 1991, well above the program minimum. The CBO baseline assumes that EEP bonuses of \$1 billion will be issued in 1993 and that the total will decline gradually to \$800 million by 1997.

Government-Guaranteed Export Credits. The Export Credit Guarantee Program provides guarantees for short- to intermediate-term export credits that banks extend for purchases of U.S. agricultural products by countries deemed creditworthy. Typically, the guarantees cover 98 percent of the loan principal and a part of the interest rate. This program helps to promote or maintain export markets, and its cost depends on the level and timing of loan defaults and subsequent repayments. Defaulted loans become direct loans of the U.S. government. Payments on defaulted loans are generally rescheduled to allow repayment over an extended period. Legislation is required to forgive the debts of specific countries.

Under the Export Credit Guarantee Program, the GSM-102 and GSM-103 programs guarantee loans with repayment periods of up to 36 months and 10 years, respectively. The 1990 farm bill makes a minimum of \$5 billion available to the GSM-102 program and a minimum of \$500 million available to the GSM-103 program each year, subject to the creditworthiness of potential borrowers and other lending constraints. In addition, the 1990 farm bill makes a minimum of \$1 billion in export credit guarantees available to "emerging democracies" during the 1991-1995 period.

In accordance with the Federal Credit Reform Act of 1990, the broad umbrella of CCC commodity outlays no longer covers the outlays associated with the Export Credit Guarantee Program.¹⁷ They are accounted for separately and, for guarantees issued after 1991, are estimated by using the net present value of expected defaults and eventual repayments. The effect of the guarantee program on farm program spending is felt through its effect on the export demand for U.S. agricultural products. Greater export demand may influence market prices or, if anticipated by the Secretary of Agriculture, may lead to lower

acreage reduction requirements and larger plantings.

The Market Promotion Program. The Market Promotion Program (MPP) is used to promote export markets for U.S. agricultural products. The current law establishes a cooperative (cost-sharing) relationship between the USDA and eligible trade organizations that operate the export marketing programs. The 1990 farm bill establishes a minimum funding level for the MPP of \$200 million annually.

The Economic Outlook

The performance of the agricultural sector depends on the overall performance of the U.S. and global economies. Conditions in both affect the value of the U.S. dollar, the prices farmers pay for the production materials they purchase, and the domestic and foreign demand for U.S. agricultural products.

The U.S. economy slipped into a recession during the second half of 1990. In calendar year 1991, real gross domestic product (GDP) fell at an estimated rate of 0.8 percent.¹⁸ At the time of the baseline projections, CBO forecast that real GDP would increase 2.8 percent in 1992 (on a fourth-quarter-to-fourth-quarter basis) and 3.3 percent in 1993, with real growth in later years averaging 2.6 percent. Economic recovery could lead to increased demand for high-value agricultural products.

The value of the U.S. dollar in the global market can affect the demand for U.S. agricultural exports. A lower-valued dollar would decrease the cost of U.S. exports to foreign purchasers and could have a positive effect on the level of commodity exports, particularly in those markets where changes in exchange rates affect consumer prices. Similarly, an in-

17. The Budget Enforcement Act of 1990 mandated the change.

18. For details on the economic outlook, see Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1993-1997* (January 1992).

Table 3.
Changes in CBO Projections for the Commodity Credit Corporation
Since August 1991 (By fiscal year, in millions of dollars)

	1992	1993	1994	1995	1996	1992-1996
August 1991 Baseline	11,451	10,630	9,073	7,620	8,159	46,933
Changes						
Program changes caused by legislation ^a	266	-775	-775	-775	-775	-2,834
Technical reestimates						
Increased use of Export Enhancement Program	500	400	450	400	350	2,100
Market conditions	-3,297	-692	318	224	332	-3,115
Other	-54	94	134	249	304	727
Total	-2,585	-973	127	98	211	-3,122
February 1992 Baseline	8,866	9,657	9,200	7,718	8,370	43,811

SOURCE: February 1992 projections of the Congressional Budget Office.

a. Legislation providing disaster assistance increased outlays by \$995 million in 1992. The increase was partly offset by other legislation that transferred \$729 million in CCC administrative costs to another budgetary account. That change, which also caused the outlay reductions in the 1993-1996 period, has no net effect on total federal outlays.

crease in the value of the dollar could have a negative effect on the level of commodity exports. At the time of the baseline projections, CBO expected that the value of the dollar--measured against the currencies of important industrial countries that are U.S. trading partners--would decline in the first quarter of 1992, decreasing by 6.5 percent on an average annual basis, and then gain strength in the second and third quarters of 1992, increasing by 9.5 percent and 4.6 percent, respectively. Following those early adjustments, CBO assumed that the value of the dollar would remain stable through 1997.

The CCC baseline assumes no changes in the agricultural or trade policies of foreign nations that would cause significant changes in world prices or shifts in foreign demand for U.S. commodities--other than those required by previous trade agreements. Such changes could result from the current GATT or NAFTA negotiations or from future changes in EC or Mexican agricultural policies, but that remains uncertain.

Changes in the Baseline Projections Since August 1991

Changes have been made in the baseline projections since the August 1991 baseline (see Table 3). Although reestimates are substantial, there is a large net effect on projected CCC outlays in 1992 and 1993 only.

Program Changes Caused by Legislation

Two provisions in legislation enacted since August 1991 cause projected CCC outlays to be \$266 million higher in 1992 but \$775 million lower in later years. The first legislative change was the \$995 million in disaster assistance for the 1990 and 1991 crops provided in the 1992 Supplemental Appropriations Act.

Table 4.
Comparison of Administration's Current Services Projections and CBO's Baseline Projections
for the Commodity Credit Corporation (By fiscal year, in millions of dollars)

	1992	1993	1994	1995	1996	1997
Current Services ^a	10,765	11,207	10,392	8,427	8,749	8,360
Differences						
Market factors	-1,027	-690	-526	-31	118	590
Working capital change	-1,000	-1,000	-1,000	-1,000	-1,000	-1,000
Other differences	<u>128</u>	<u>140</u>	<u>334</u>	<u>322</u>	<u>503</u>	<u>564</u>
Total ^b	-1,899	-1,550	-1,192	-709	-379	154
CBO Baseline	8,866	9,657	9,200	7,718	8,370	8,514

SOURCE: February 1992 projections of the Congressional Budget Office.

a. Excludes outlays of the wool program.

b. CBO February baseline less current services.

The second was the removal from the CCC accounts of the salaries and expenses of the Agricultural Stabilization and Conservation Service, which administers the CCC programs. The latter step did not reduce total budgetary outlays but merely removed such expenses from the CCC account and placed them in a discretionary account, subject to direct appropriation action.¹⁹ Such accounting changes make it hard to compare levels of CCC spending over several years.

Several other activities have been taken out of the CCC accounts in the past. The Conservation Reserve Program payments were removed in 1987 and, more recently, the cost of the export credit programs.

Technical Reestimates

CCC projections for 1992 have changed significantly since August 1991 because of changes in market conditions and in the level of export

subsidies. The drop in expected outlays for grains is the major component of the reestimates of commodity supply and demand. A poor corn yield in 1991 raised the market price and reduced deficiency payments and loan outlays from the levels expected last August, and reduced stocks have created expectations of higher wheat prices for the 1992 crop. After the changes to the 1992 crops, the outlays currently forecast for later years do not differ significantly from the earlier projection.

Other changes include the increase expected in cash outlays for the Export Enhancement Program. The current baseline assumes a much higher level of export subsidies than forecast earlier. Total subsidies are now projected to range between \$1.2 billion in 1992 and \$800 million in 1997. Large per-ton subsidies are expected to be maintained on a substantial share of wheat exports. Savings in the commodity accounts will partially offset the direct outlays for EEP subsidies as some additional exports materialize. The implied savings are already projected in the supply and demand reestimates.

The other areas of notable change since August 1991 include a higher cost of net interest expenses--the result of a lower projection of

19. The \$266 million adjustment in the 1992 budget projection reflects the combined effect of the \$995 million disaster assistance legislation (an increase) and the \$729 million shift in the salaries and expenses account (a decrease). Over the 1993-1997 period, a \$775 million adjustment in each year reflects a shift in the salaries and expenses account.

interest collected by the CCC on commodity loans.

The Administration's Current Services Estimates

The Administration's current services baseline for CCC spending is compared with the CBO baseline in Table 4. The Administration's baseline is consistently higher than CBO's projected outlays until 1997. The biggest difference comes in 1992 and 1993, when CBO's projections are \$1.9 billion and \$1.6 billion lower, respectively, than those of the Administration.

The major differences between the Administration and CBO involve assumptions about

market conditions and changes in working capital. The Administration uses a change in working capital to balance outlays reported by the Treasury with apparent outlays stemming from individual program activities. Historically, the change has sometimes been positive and sometimes negative, but it has averaged close to zero. Therefore, CBO does not include the working capital change in its projections. The Administration, in contrast, assumes \$1 billion a year for the baseline period.

The Administration projects that spending on commodity programs will be about \$1 billion higher than the CBO projection for 1992, almost \$700 million higher for 1993, and more than \$500 million higher for 1994. Most of the difference involves wheat and feed grains, with the Administration forecasting lower market prices and larger deficiency payments than CBO does for 1992 and 1993.

The Outlook for Major Commodities

Plantings and production for most of the major 1992 program crops are expected to be higher than last year. Soybeans and cotton are notable exceptions. The requirements of the acreage reduction programs have been reduced for all crops except cotton (there is no acreage reduction program for soybeans). The acreage reduction requirements are at historically low rates: for the 1992 crops, they range from zero for rice and oats to 10 percent for cotton. In later years of the baseline period, the requirements are projected to be set at similarly low levels--zero to 5 percent for all commodities except cotton.

Those developments arise because current and projected stocks are relatively low. Stocks-to-use ratios are also expected to remain low--around 16 percent for corn, soybeans, and rice and around 29 percent for wheat and cotton in the later years of the baseline period.

Low acreage reduction requirements do not imply that U.S. farmers are planting fencerow to fencerow. CBO projects that more than 35 million acres of cropland will be enrolled in the long-term Conservation Reserve Program in 1992 and that about 20 million more acres will be idled in annual programs. CBO expects that the 0/92 and 50/92 programs, which are essentially paid diversion programs, will account for about half of the latter amount. Capacity to expand production exists if it is needed.

Domestic use of the major grains and soybeans is expected to rise in the 1991 crop year but to fall for rice, cotton, and dairy products. In the 1992 crop year, use is projected to rise for all the major commodities except wheat and soybeans. Exports of wheat and soybeans for the 1992 crops are expected to recede after their surge in 1991. High levels of export subsidies and export guarantees, especially to the republics of the former Soviet Union, contributed to the export demand for the 1991 wheat crop.

Corn

The size of the 1991 crop of corn was smaller than expected because of below-normal rainfall in much of the Corn Belt during July. The strength of demand during the 1991 crop year has been mixed: domestic use is up because of increased use for feed as well as for food and industrial purposes; exports, however, are down. Ending stocks for the 1991 crop year are projected at 1.1 billion bushels, down from 1.5 billion bushels in the previous year. The expected reduction in corn stocks is attributed to tighter supplies and strong domestic demand. The season-average farm price for the 1991 crop year is projected at \$2.44 per bushel, up 16 cents from 1990.

The 1992 corn crop is projected to increase to 8.5 billion bushels, the largest since 1985.

Use is anticipated at 8.2 billion bushels, with ending stocks rebuilding to 1.4 billion bushels. CBO projects that the season-average price will fall to \$2.27 per bushel, near the 1990 season average. Outlays for the corn program are projected to increase to \$3.6 billion in fiscal year 1993, up from \$2 billion in 1992, as deficiency payments increase for the 1992 and 1993 crops.

Government Programs

The 1990 farm bill extended the then-existing target price for corn at \$2.75 per bushel for the 1991 through 1995 crops. Target prices for the other feed grains--sorghum, barley, and oats--are also continued at their 1990 crop levels. Deficiency payments are offered to program participants, but 15 percent of their crop acreage base is no longer eligible for payments. These unpaid "normal flexible" acres can be planted in program or nonprogram crops (other than fruits and vegetables). The announced advanced deficiency payment rate for the 1992 crop of corn is 19.2 cents per bushel, available to producers when they enroll in the program. The nonrecourse loan rate for corn is \$1.72 per bushel for the 1992 crop.

If the Secretary of Agriculture chooses to put an acreage reduction program in place, the 1990 farm bill requires that the acreage reduction requirement not exceed 20 percent of base acreage for feed grains other than oats. An acreage reduction program may not be established for oats in any year. The acreage reduction requirements for the 1992 crops have been set at 5 percent for corn, sorghum, and barley, and they are projected to remain at 5 percent for the balance of the baseline period.

The Farmer-Owned Reserve is closed to the 1991 crop of feed grains because the ending-stocks-to-use ratio is too low and the market-price-to-loan-rate ratio too high to allow entry. CBO projects that the FOR will remain closed for the entire baseline period.

Production

Below-normal rainfall over much of the Corn Belt reduced the 1991 corn crop to 7.5 billion bushels from the previous year's level of 7.9 billion bushels. (Table 5 summarizes production and use projections for corn; Box 2 explains important concepts found in all tables in this chapter.) Assuming normal weather for the 1992 growing season, CBO projects a corn crop of 8.5 billion bushels, second only to the 8.9-billion-bushel crop in 1985. Increased plantings because of the lower acreage reduction requirement, resumption of normal weather, and average increases in yield account for the projected increase. Corn production is projected to increase moderately over the rest of the baseline period as constant acreage reduction requirements, trend increases in yield, and assumed expiration of some CRP contracts allow for growth in output.

Use

Total use in the 1991 crop year is expected to increase about 2 percent, with domestic use up about 6 percent and exports declining nearly 10 percent. Tighter supplies of other feed grains and high demand in the livestock sector account for a projected record use for animal feed of 5 billion bushels. Projected higher wheat prices for the coming summer months could also contribute to greater corn use as less wheat and more corn is fed to livestock. Feed use on cattle feedlots may drop slightly, but hog, poultry, and dairy feed demand are all expected to increase. CBO anticipates that feed demand will continue to grow at an average rate of about 1 percent annually over the baseline because of continued low corn prices and projected growth in demand for livestock products.

Export demand for corn in the 1991 crop year has been weak. Export sales to several major markets (the former Soviet Union,

Table 5.
Corn Supply and Use (By crop year)

	Actual 1990	Projected						
		1991	1992	1993	1994	1995	1996	1997
Millions of Acres								
Base Acres (Net of CRP)	82.7	83.0	83.3	83.4	82.9	83.0	83.7	85.6
Percentage of Base Acreage								
Acreage Reduction Program	10	7.5	5.0	5.0	5.0	5.0	5.0	5.0
Participation in ARP	78	77	77	79	76	75	74	75
Millions of Acres								
Total Idled Acres ^a	14.7	11.3	9.9	10.2	10.3	10.4	10.3	9.6
Acres Planted	74.2	76.0	78.6	77.6	77.3	77.7	78.5	80.2
Acres Harvested	67.0	68.8	71.3	70.4	70.2	70.5	71.2	72.7
Bushels per Acre								
Yield per Harvested Acre	118.5	108.6	119.0	120.7	122.2	123.7	125.2	126.7
Program Yield	104.6	104.6	104.6	104.6	104.6	104.6	104.6	104.6
Millions of Bushels								
Supply								
Beginning stocks	1,344	1,521	1,086	1,370	1,493	1,504	1,487	1,486
Production	7,934	7,474	8,481	8,495	8,575	8,723	8,917	9,213
Total (Including imports)	9,282	9,015	9,572	9,870	10,073	10,232	10,409	10,704
Use								
Food, seed, and industrial	1,367	1,399	1,464	1,541	1,613	1,681	1,747	1,818
Feed and residual	4,668	4,970	5,077	5,104	5,152	5,192	5,223	5,274
Exports	1,727	1,560	1,661	1,733	1,804	1,873	1,953	2,046
Total	7,761	7,929	8,202	8,377	8,569	8,746	8,923	9,138
Ending Stocks								
Farmer-Owned Reserve	1,521	1,086	1,370	1,493	1,504	1,487	1,486	1,567
CCC-owned stocks	3	0	0	0	0	0	0	0
Outstanding CCC loans	371	73	58	50	45	41	37	33
Free stocks ^b	209	100	240	270	230	190	165	165
	938	913	1,072	1,173	1,229	1,256	1,284	1,369
Dollars per Bushel								
Prices								
Target price	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
Season-average price	2.28	2.44	2.27	2.22	2.26	2.31	2.33	2.33
Loan rate	1.57	1.62	1.72	1.72	1.68	1.65	1.66	1.66
Deficiency payment rate	0.51	0.41	0.57	0.62	0.58	0.53	0.51	0.51

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

NOTES: CRP = Conservation Reserve Program; ARP = Acreage Reduction Program; CCC = Commodity Credit Corporation. See Glossary for an explanation of other terms.

- a. Includes acres taken out of production by annual acreage reduction programs, including the 0/92 program, and base acres enrolled in the 10-year Conservation Reserve Program.
- b. Free stocks are privately held stocks not being used as collateral for government loans.

South Korea, Mexico, and Egypt) have lagged significantly behind the previous year. In fiscal year 1991, corn accounted for 58 percent of the credit for commodities under the GSM program for the former Soviet Union, while wheat accounted for 13 percent. In fiscal year 1992, the share of corn fell to 25 percent, with wheat claiming about 40 percent of the GSM credits. This change probably reflects the

shift from early concern over maintaining livestock populations and output to subsequent concern over the small wheat crop in the former Soviet Union and the maintenance of plentiful bread supplies. Total U.S. exports of corn are projected to rise about 7 percent during the 1993 crop year and about 4 percent annually for the rest of the baseline period.

Box 2.

Important Concepts in the Commodity Supply, Use, and Outlay Tables

The tables in this chapter are designed to be self-explanatory, though additional information is sometimes needed to understand how the various elements fit together.

The number of acres planted in program crops cannot be directly calculated from information in the tables. Planted acres of corn, for example, equal the sum of acreage planted by program participants and nonparticipants. Participating producers may plant on their corn program base acreage, less the acreage that must be idled under the corn acreage reduction program. That amount represents a ceiling on acreage planted in corn for the participating producer. Participating producers can, and sometimes do, plant less than the maximum and receive program benefits on the acres planted.

Under the 1990 legislative provisions on planting flexibility, participating producers can plant any crop (except fruits and vegetables) on 15 percent of base acreage on which no deficiency payments are made, and on an additional 10 percent if they voluntarily forgo payments. Nonparticipating producers are free to plant corn on any amount of acreage regardless of the size of their base. However, corn producers who participate in another crop program, but not in the corn program, cannot plant corn in excess of their program base acreage, unless they plant corn on their unpaid flexible acres.

The total deficiency payment rate in some cases cannot be derived from the price information provided in the tables. Box 1 on page 9 describes the calculation.

Data in the supply and use tables involve crop, or marketing, years; data in the program outlay tables deal with fiscal years. The calendar period that a marketing year covers varies by crop; only the dairy marketing year coincides with the fiscal year. In the crop programs, outlays in any fiscal year can stem from costs associated with several different crop years.

Prices and Stocks

Although crop prices often increase during the summer, when yield reductions are evident, low wheat prices last summer held down the price of corn--despite damage to the corn crop. After the start of the 1991 crop year, increases in the price of wheat removed the downward pressure on the corn price and allowed the season-average price projected for 1991 to increase about 16 cents over the previous year. The season-average price of corn for the 1992 crop year is projected at \$2.27 per bushel, about on a par with 1990. Future corn prices are expected to remain between \$2.22 and \$2.33 per bushel for the remainder of the baseline period.

Ending stocks for the 1991 crop year are projected at 1.1 billion bushels--29 percent below levels a year earlier. CBO projects that there will be no corn in the Farmer-Owned Reserve and that government-owned stocks and outstanding loan stocks will be very low. Carryover should rebuild substantially in the 1992 crop year to 1.4 billion bushels and should increase moderately or hold about steady for several years thereafter. Stocks could jump in 1997 if acreage idled under the Conservation Reserve Program returns to production as projected. CCC stocks are projected to remain at only nominal levels throughout the baseline period.

Government Costs

Outlays for the corn program are projected to increase to \$3.6 billion in fiscal year 1993, up from \$2 billion in 1992, as deficiency pay-

Table 6.
Corn and Feed Grain Program Outlays (By fiscal year, in millions of dollars)

	Actual 1991	Projected					
		1992	1993	1994	1995	1996	1997
Corn Program Outlays							
Net Lending							
Loans made	1,662	1,579	2,046	2,127	1,654	1,535	1,555
Cash loans repaid	-1,577	-1,557	-1,797	-2,075	-1,732	-1,606	-1,595
Net Loans	86	22	249	52	-78	-72	-40
CCC Storage and Handling Costs	96	133	26	21	18	16	15
Direct Cash Payments							
Deficiency							
Advance	1,162	1,018	1,345	1,204	1,081	1,041	1,072
Regular	1,079	892	1,952	1,975	1,009	1,669	1,553
Reserve storage	-2	0	0	0	0	0	0
Subtotal	2,239	1,910	3,296	3,180	2,090	2,710	2,624
Other	-34	-45	-9	-9	-9	-7	-7
Total Outlays	2,387	2,021	3,562	3,244	2,021	2,648	2,592
Feed Grain Program Outlays							
Sorghum, Barley, and Oats	335	358	431	399	301	321	307
All Feed Grains (Including corn)	2,722	2,379	3,994	3,642	2,323	2,969	2,899

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

NOTE: CCC = Commodity Credit Corporation.

ments increase for the 1992 and 1993 corn crops (see Table 6). Outlays remain fairly high in 1994 at \$3.2 billion, but are lower for the rest of the baseline because of lower payment rates. Fiscal year 1995 outlays fall to \$2 billion partly because of a program change that affects the timing of the deficiency payment on the 1994 crop. (A portion of the payment will be delayed until fiscal year 1996.) CBO projects that government costs for the programs for minor feed grains will increase 20 percent in 1993, to \$431 million, and will decline thereafter to roughly \$300 million in 1995 through 1997.

Wheat

Reduced yields, lower plantings, and higher exports in crop year 1991 caused the price of wheat to rise from a disappointing season average in 1990. However, a projected price of nearly \$3.00 a bushel for the 1991 crop still falls below the drought-induced season averages of 1988 and 1989. Use in the 1991 crop year is projected to remain at the same level as in the previous year because the increase in exports is offsetting the drop in feed use.

Planted acres for the 1992 crop surpass those for 1991 only marginally. Given normal yields, however, total supplies are likely to remain the same, as the higher crop offsets the reduced stocks on hand at the beginning of the year. With a continuation of relatively low stocks projected through the 1997 crop year, it is assumed that the Secretary of Agriculture will set the annual acreage reduction requirements at low levels. In response to higher prices, government outlays are projected to fall sharply in fiscal year 1992 and to rise slowly thereafter--to \$2.1 billion by 1997.

Government Programs

Numerous provisions of government farm programs affect wheat farmers, traders, and consumers. Several provisions affect potential supplies, including the Conservation Reserve Program, the 0/92 program, and the flexibility provisions of the 1990 farm legislation. A farmer will receive government deficiency payments on a maximum of 85 percent of eligible wheat acreage; the remaining 15 percent, the normal flexible acres, may be planted in other crops. For the 1992 through 1995 crop years, the Secretary can set the acreage reduction requirement at any level between zero and 15 percent if the previous year's stocks-to-use ratio does not exceed 40 percent. The acreage reduction requirement for the 1992 crop has been announced at 5 percent, down from 15 percent in 1991.

Another provision that affects wheat is the target price, which CBO assumes will remain frozen at \$4.00 per bushel through the projection period. CBO also assumes that the program yield on which government payments to producers are based will remain frozen. Loan rates are set by a formula using average market prices adjusted by stocks-to-use ratios with declines capped. The Farmer-Owned Reserve was opened at the Secretary's discretion for the 1990 crop only, and CBO assumes that it will be closed during the remainder of the baseline period. Disaster payments, such as those in the 1992 supplemental appropria-

tions legislation that covered the 1990-1991 crops and some in 1992, are not expected to recur during the baseline period.

Export programs that may benefit wheat exports include the Export Enhancement Program and the export guarantee program. Under current law, the EEP must be run at a minimum annual level of \$500 million through 1995. The Export Credit Guarantee Program is mandated at an annual minimum of roughly \$5.7 billion, including guarantees to emerging democracies. The 1990 legislation limited the extension of export credit guarantees to creditworthy countries.

Production

As shown in Table 7, wheat production in the 1991 crop year fell dramatically--to the second lowest level in more than a decade. The production level in 1991 was lower than the drought-reduced level in 1989 and only 9 percent higher than the drought-reduced level in 1988. A combination of poor yields and a 15 percent acreage reduction requirement led to the small crop. The decline was especially severe for winter wheat, which yielded the smallest crop in almost two decades.

The 1992 crop is projected to rise to 2.4 billion bushels--with increased plantings reported and yields expected to rebound. Plantings for 1992 did not increase commensurate with the reduced acreage reduction requirement because of lower prices at fall planting and the final implementation of the 1990 farm legislation; the provisions for flexibility in the 1990 legislation offered a payment option on flexible acres for the 1991 winter wheat crop but did not extend the offer to future crops. Beginning with the 1992 crops, production is expected to remain at about 2.4 billion bushels through 1995 and to increase thereafter.

With stocks expected to grow basically in line with use, the Secretary of Agriculture is expected to keep the acreage reduction requirement at 5 percent through 1995 but to

Table 7.
Wheat Supply and Use (By crop year)

	Actual 1990	Projected						
		1991	1992	1993	1994	1995	1996	1997
Millions of Acres								
Base Acres (Net of CRP)	80.5	79.4	79.0	78.6	78.1	77.5	78.1	81.6
Percentage of Base Acreage								
Acreage Reduction Program	0/5.0	15.0	5.0	5.0	5.0	5.0	0	0
Participation in ARP	82.9	85.2	81.4	81.0	81.1	82.8	86.0	85.1
Millions of Acres								
Total Idled Acres ^a	16.7	25.9	18.8	19.2	19.6	20.2	16.8	15.0
Acres Planted	77.2	69.9	70.7	72.5	72.5	71.4	74.5	76.3
Acres Harvested	69.3	57.7	63.0	63.2	63.1	62.2	64.9	66.5
Bushels per Acre								
Yield per Harvested Acre	39.5	34.3	38.1	37.7	38.1	38.4	38.7	39.0
Program Yield	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
Millions of Bushels								
Supply								
Beginning stocks	536	866	435	589	658	690	652	687
Production	2,736	1,981	2,400	2,380	2,403	23,86	2,512	2,594
Total (Including imports)	3,309	2,888	2,877	3,012	3,104	3,119	3,207	3,324
Use								
Food, seed, and industrial	887	877	890	908	925	942	962	982
Feed and residual	489	350	250	257	259	258	257	259
Exports	10,68	1,226	1,148	1,189	1,230	1,266	1,302	1,358
Total	2,444	2,453	2,288	2,354	2,414	2,466	2,521	2,599
Ending Stocks								
Farmer-Owned Reserve	14	75	35	0	0	0	0	0
CCC-owned stocks	163	150	150	150	150	149	149	149
Outstanding CCC loans	217	35	50	50	50	50	50	50
Free stocks ^b	472	175	355	458	490	453	487	526
Dollars per Bushel								
Prices								
Target price	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Season-average price	2.61	2.99	3.15	2.95	2.90	3.00	2.98	2.91
Loan rate	1.95	2.04	2.21	2.39	2.27	2.16	2.17	2.17
Deficiency payment rate	1.28	1.20	0.65	1.15	1.10	1.00	1.02	1.09

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

NOTES: CRP = Conservation Reserve Program; ARP = Acreage Reduction Program; CCC = Commodity Credit Corporation. See Glossary for an explanation of other terms.

a. Includes acres taken out of production by annual acreage reduction programs, including the 0/92 program, and base acres enrolled in the 10-year Conservation Reserve Program.

b. Free stocks are privately held stocks not being used as collateral for government loans.

lower it to zero in 1996 and 1997 to avoid a drop in the projected stocks-to-use ratio.¹ Program participation levels are expected to remain above 80 percent during the baseline period, with deficiency payment rates generally above \$1 a bushel from 1993 to 1997.

CBO projects that the level of base acres of wheat will continue falling through the 1995 crop year as more acreage enters the Conservation Reserve. A total of about 20 million acres of wheat base (base acres of wheat) are projected to be idled each year under annual and long-term programs through 1995. CBO projects that this total will fall to 15 million acres in 1997.

During the 1992-1997 baseline period, more than half of the total idled acreage is in the 10-year Conservation Reserve Program. Some of the original CRP contracts will begin expiring with the 1996 crops. The CBO baseline does not assume renewal of the expiring CRP contracts. It assumes that the wheat acreage coming out of the Conservation Reserve is planted or idled under the annual 0/92 program.

Through the middle of the 1991 crop year, base acres of wheat in the CRP exceeded 10 million and accounted for almost half of the total in the program. Wheat acreage idled under the 0/92 program is high--more than 5 million acres in 1991--and is expected to remain close to that level through 1996. Thereafter, such acreage may rise sharply as CRP contracts expire. However, total idled acreage is expected to fall at the end of the baseline period, with none required to be set aside in order to participate in the wheat program.

Planting is also affected by the provisions for flexibility in the 1990 legislation. The level of wheat acres "flexed out" of wheat in 1991--that is, planted in other crops--reflects the impact of a 15 percent reduction in payment acres (for spring wheat) under the flexi-

bility provision of the 1990 Omnibus Budget Reconciliation Act. Although producers of winter wheat were offered a payment option for the 1991 crop year, all producers will face the 15 percent reduction for 1992 and later crop years. Nevertheless, the level of "net flexible acreage" was 1.7 million for the 1991 wheat crop and is expected to be larger over the remainder of the baseline period.² The most important determinants of the level of flexible acres are weather conditions and expectations at planting time of market returns for wheat compared with alternative crops.

Total supplies of wheat are projected to remain low in 1992 but to rise gradually thereafter. Even by 1997, however, supplies projected at 3.3 billion bushels will be much lower than those for most of the 1980s.

Use

CBO projects that total wheat use will decline in the 1992 crop year and grow at a rate of about 2 percent a year in each year thereafter, reaching 2.6 billion bushels in 1997. Food use is expected to grow slowly each year and to account for about one-third of the total. The other major components of use--for feed and export--exhibit more variable patterns than food use or seed use.

Feed use, which reached its second highest level ever in the summer of 1991, is expected to drop this summer because wheat prices are likely to be much higher in 1992 than in the 1991 crop year. Feed use for the 1992 crop is projected at 250 million bushels, 100 million bushels less than is expected for the 1991 crop. Feed use in each year of the 1993-1997 period is projected at roughly the same level as in 1992. Feed use in recent years has been extremely variable, ranging from 146 million bushels in 1988 to 489 million bushels in 1990. The determining factors are summer prices

1. The Secretary of Agriculture recently announced that the acreage reduction program requirement for the 1993 wheat crop would be zero.

2. The "net flexible acreage" for wheat is defined as the number of acres taken out of wheat production less the number of acres put into wheat production from other program crops.

relative to other feeds, livestock numbers and prices, and the quality of the grain harvested.

Although exports jumped in 1991 from the depressed level of 1990, they are expected to remain lower than during several earlier years. The export surge materialized despite record crops and exports in the European Community and Canada, which are the major competitors of the United States in the world wheat market, and despite only a marginal increase in imports in most countries. The key factor is the almost 14-million-ton increase in imports by China and the former Soviet Union combined.

CBO projects that exports will drop in the 1992 crop year as overhanging stocks held by major competitors--as well as credit needs in some importing countries--limit U.S. export opportunities. Between 1993 and 1997, exports are assumed to rise by about 40 million bushels a year--roughly 1 million tons. The assumption depends on continued export subsidies and export credits. In addition, the CBO baseline does not assume a GATT agreement or a major retrenchment in exports by competitors such as the European Community.

The Export Enhancement Program and the Export Credit Guarantee Program are being run at high levels, and CBO's projections assume that they will continue at those levels during the baseline period. EEP subsidies, mostly used for wheat exports, are projected at \$1.2 billion for fiscal year 1992 and are expected to decline slowly each year, reaching \$800 million by fiscal year 1997. Benefits from this program--such as higher exports, higher prices, and lower program payments in wheat--show up as reduced wheat outlays; the cost of the subsidy is carried as a cash outlay in another category, although it is still included in total CCC outlays. Subsidies are running at about \$50 a ton (\$1.36 a bushel), or about 30 percent of the export price of wheat. A substantial share of wheat exports have benefited from subsidies.

The Export Credit Guarantee Program is projected to cover \$5.1 billion in exports in

each year of the baseline period. The annual minimum requirement under current law is roughly \$5.7 billion, but countries generally do not use all of the credit guarantees that are offered. Of the \$4.5 billion guaranteed in fiscal year 1991, almost 20 percent went for wheat. From January 1991 through April 1992, a total of \$3.75 billion in credits was offered to the former Soviet Union. Of that sum, wheat was allocated about 40 percent of the fiscal year 1992 credits.

Because of marketing problems, concern for shortages in urban areas, and a sharp drop in the 1991 wheat crop harvested by the former Soviet republics, their imports are large and have been accorded a high priority this year. Announcements by the Secretary of Agriculture of additional credit to the former republics continue, and the total extended for 1992 may equal or exceed the CBO baseline assumption that \$2.5 billion will be allocated annually through 1997. The costs of the Export Credit Guarantee Program, in terms of potential defaults, are carried outside the CCC account. But the benefits in generating exports and reducing program costs show up in the CCC budget.

The projection for exports is tenuous because it depends on the response of major importers like China to meeting urban needs as well as on the political viability of the republics of the former Soviet Union and their ability to attract credit. Uncertain conditions in the latter include production prospects, the pace of price reform (the reduction of consumer subsidies on basic foods), and the effect on consumer demand. Adding to the uncertainty about the export projection is the degree of reform that the European Community may make to its Common Agricultural Policy.

Prices and Stocks

Despite a buildup in 1990, wheat stocks are expected to hit the lowest level since 1974 at the end of the 1991 crop year. Stocks would account for less than 18 percent of expected

use for that year. The drop comes in outstanding loans and free stocks; the declines in both of those privately controlled categories of stocks are in response to higher prices. Stocks owned by the government at the end of the 1991 crop year are expected to be near the minimum of 147 million bushels needed for the Food Security Wheat Reserve.

Wheat in the Farmer-Owned Reserve rose in 1991 because the Secretary of Agriculture used discretionary authority to allow the 1990 crop to enter. Thus, producers can obtain storage payments in lieu of forfeiting their grain after the nine-month maturity of the regular CCC loans. When the trigger price was reached at the end of January 1992, however, storage payments stopped. About 75 million bushels of the 140 million bushels that were placed in the FOR are expected to remain there at the end of the 1991 crop year.

Ending wheat stocks are expected to rise above those of 1991, but the stocks-to-use ratio is expected to remain in the 26 percent to 29 percent range for the 1992-1997 crop years. CBO assumes no entry of future crops into the FOR and expects that all of the current FOR bushels will be redeemed by the close of the 1993 crop year. With market prices projected to stay well above the relatively low rates for nonrecourse loans, farmers have little incentive to use the loan program. Thus, outstanding loans at the end of each crop year are expected to be minimal. The Food Security Wheat Reserve is expected to maintain its current level throughout the baseline period, with no emergencies triggering the release of grain. Free stocks that farmers, traders, and processors hold will make up the bulk of total stocks, with pipeline needs and speculative demand determining the actual level.

Average market prices are expected to rise in 1992. Given the extremely low level of stocks on hand at the beginning of the crop year, summer prices will be sensitive to both the size and the quality of the new wheat crop. In later years, the season-average wheat price is projected to vary between \$2.90 to \$3.00 a

bushel--above the 1990 season-average price but below the 1988 and 1989 season-average prices, both of which were affected by drought. In addition to weather, other major factors that will affect future prices include the response of flexible acres to price shifts, the import needs of the Chinese and the republics of the former Soviet Union, and any breakthroughs that occur in the GATT negotiations.

Government Costs

As shown in Table 8, outlays are expected to fall sharply in fiscal year 1992--to \$1.6 billion from the almost \$3 billion spent in 1991. Final deficiency payments for the 1991 crop, made in fiscal year 1992, amounted to only \$1.2 billion. That occurred because the 15 percent acreage reduction requirement in 1991 and the unpaid flexible acreage for spring wheat producers reduced the number of payment acres. Advance deficiency payments for the 1992 crop made this spring are expected to reach only \$450 million, less than half the 1991 level. The reduction in payments is projected because the expected deficiency payment rate is only 65 cents a bushel and the full effect of the flexibility provisions of the 1990 legislation will be felt in the 1992 crop. Deficiency payments in 1993 are likely to remain relatively low because of the final 1992 crop payment made in fiscal year 1993. In the later years of the baseline period, deficiency payments are projected to range between \$1.8 and \$2 billion a year.

Net loan, CCC storage, FOR storage, and other transaction categories are projected at low levels throughout the baseline period. The volume of loans made is projected to remain less than 10 percent of annual production, and repayment of loans is expected. Annual loan outlays range from relatively low costs to low receipts. Total outlays in the wheat program are projected to grow to \$2.1 billion in fiscal year 1997; that projection does not factor in costs associated with EEP export subsidies or with disaster payments (which are separate line items in total CCC outlays)

Table 8.
Wheat Program Outlays (By fiscal year, in millions of dollars)

	Actual 1991	Projected					
		1992	1993	1994	1995	1996	1997
Net Lending							
Loans made	576	496	700	747	625	592	638
Cash loans repaid	-495	-544	-635	-858	-708	-568	-612
Net Loans	81	-49	64	-111	-83	23	26
CCC Storage and Handling Costs	52	55	52	52	52	52	52
Direct Cash Payments							
Deficiency							
Advance	982	450	788	751	692	785	865
Regular	1,740	1,160	650	1,144	1,102	1,010	1,152
Subtotal	2,722	1,610	1,439	1,895	1,794	1,795	2,016
Reserve storage	2	19	15	5	0	0	0
Other	101	-4	30	30	30	30	30
Total Outlays	2,958	1,632	1,600	1,871	1,793	1,900	2,125

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

NOTE: CCC = Commodity Credit Corporation.

or rental payments for idling land under the Conservation Reserve Program (which is carried in a separate budget account).

Rice

Rice prices are expected to remain relatively high in the 1991 crop year as demand stays strong and stocks remain moderate. Projected government outlays fall for fiscal year 1992 but rise somewhat in 1993. Outlays for each year in the baseline period are projected to drop below those of 1991.

Government Programs

The target price remains fixed at \$10.71 for the baseline period, and the loan rate is assumed to be \$6.50 per hundredweight—the minimum allowed under current law. The deficiency payment rate is calculated as the difference between the target price and the price in the first five months of the marketing year; that method will change in 1994, when the

calculation considers the calendar-year market price as well as the five-month marketing-year price.

The acreage reduction requirement is set to generate carryover stocks equal to between 16 percent and 20 percent of use in the previous three years. The acreage reduction requirement for the 1992 crop is set at zero, down from an idling requirement of 5 percent for the 1991 crop, and 20 percent and 25 percent for the two previous years. For the remainder of the baseline period the acreage reduction requirement is expected to remain at zero. To be eligible for deficiency payments and marketing loan benefits, producers participating in the program are thus not required to idle any acreage as long as they plant no more than their established base acreage for rice.³

3. The Secretary of Agriculture may choose to have no acreage reduction program, rather than setting the acreage reduction requirement at zero. If there were no program, however, farmers would not be restricted to planting within their base, and the 50/92 program would not be in effect. The 50/92 program, which is essentially a payment not to plant the program crop, is very popular among rice producers.

In addition, producers may receive payments for acreage idled under the 50/92 program, as long as at least 50 percent of base acreage is planted in rice. The announced deficiency payment rate is guaranteed to be the minimum received on those voluntarily idled acres--even if the final deficiency payment rate, which is based on actual prices, is lower than the minimum.

Production

Despite a 75 percent reduction in the 1991 acreage reduction requirement, plantings for the 1991 crop were slightly lower than those for 1990 (see Table 9). Beginning with the 1991 crops, 15 percent of each producer's base acreage is no longer eligible for deficiency payments. Under the 1990 legislation, these normal flexible acres can be planted in rice, other program crops, and certain nonprogram crops. Plantings for the 1991 crop dropped in spite of a lower acreage reduction requirement because many producers chose other crops, mostly soybeans, for their unpaid flexible acres. With no deficiency payments on those acres, market returns determine the planting decision. Participants in the 1991 rice program devoted an estimated 64 percent of their unpaid flexible acreage to other crops. That percentage is higher than for most other program commodities, indicating the importance of program payments in decisions regarding the planting of rice. Participation rates for rice are close to 100 percent, the highest among program commodities. Both rice acreage eligible for deficiency payments and actual plantings in 1991 were similar to those of 1990.

Other factors reducing the 1991 rice plantings were the water shortages in California and the financial attractiveness of the 50/92 program, which pays producers for voluntarily idling land. Use of the 50/92 program was high; about one-third of the acreage held by participants in the rice program was on farms enrolled in that program. The guaranteed payment rate, a feature of the 1990 legislation, informs a producer in advance of the

minimum payment per acre that will be provided. In earlier years, depending on the movement of market prices, the final payment rate could be lower than the announced expected rate. Nearly 450,000 acres are believed to have been idled under this program in 1991--a 55 percent increase over the 1990 crop year. California, which experienced a protracted drought, accounts for a large part of the increase. Reduced plantings in that state had a particular effect on short-grain rice, all of which is grown in California, and on medium-grain rice, more than half of which is grown there.

Even with a required idling for program participants of only 5 percent, less than 70 percent of base acres was devoted to rice in 1991. Thus, lower acreage reduction requirements in future years are expected to add only a small number of acres to production. A lower acreage reduction requirement was announced for 1992, and CBO expects that it will be maintained during the rest of the baseline period to maintain the target level of ending stocks specified in the law.

Planting in future years is expected to rise to 3.1 million acres, about 8 percent higher than in the 1991 crop year. However, the yield trend is expected to be relatively flat, and the yield through 1997 is expected to remain below the 1989 record. With less land idled during the 1992-1997 baseline period than in previous years, the average yield per harvested acre is not expected to grow at a rate comparable to that of the mid-1980s. Production in the 1992 crop year is projected to rise to 170 million hundredweight--from 150 million hundredweight in 1991--and to increase marginally thereafter.

Use

Domestic use of rice accounts for almost 60 percent of total use, and its share is expected to grow to almost two-thirds by the end of the baseline period. Use of rice for food almost doubled during the 1980s and continues to expand; brewers' use has risen by about

Table 9.
Rice Supply and Use (By crop year)

	Actual 1990	Projected						
		1991	1992	1993	1994	1995	1996	1997
Thousands of Acres								
Base Acres (Net of CRP)	4,154	4,159	4,159	4,159	4,159	4,159	4,159	4,159
Percentage of Base Acreage								
Acreage Reduction Program	20	5	0	0	0	0	0	0
Participation in ARP	94	95	95	95	95	95	95	95
Thousands of Acres								
Total Idled Acres ^a	1,034	658	414	414	414	414	414	414
Acres Planted	2,887	2,859	3,114	3,114	3,114	3,114	3,114	3,114
Acres Harvested	2,824	2,751	3,079	3,079	3,079	3,079	3,079	3,079
Pounds per Acre								
Yield per Harvested Acre	5,529	5,617	5,535	5,577	5,605	5,633	5,661	5,689
Program Yield	4,849	4,845	4,845	4,845	4,845	4,845	4,845	4,845
Millions of Cwt								
Supply								
Beginning stocks	26.3	24.6	25.8	31.2	31.8	31.3	29.3	28.7
Production	156.1	154.5	170.4	171.7	172.6	173.4	174.3	175.2
Total (Including imports)	187.2	184.3	201.9	209.1	211.1	212.2	211.9	213.0
Use								
Food, seed, and industrial	83.8	94.4	98.6	102.7	106.8	110.8	114.7	118.5
Feed and residual	8.0	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Exports	70.9	63.5	71.6	74.1	72.5	71.6	67.8	64.5
Total	162.6	158.5	170.7	177.2	179.8	182.9	183.2	183.7
Ending Stocks								
CCC-owned stocks	24.6	25.8	31.2	31.8	31.3	29.3	28.7	29.2
Free stocks and outstanding CCC loans ^b	0	0	0	0	0	0	0	0
	24.6	25.8	31.2	31.8	31.3	29.3	28.7	29.2
Dollars per Cwt								
Prices								
Target price	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.71
Loan rate	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Season-average price	6.70	7.55	6.90	6.95	7.05	7.40	7.55	7.60
World price	5.16	6.12	5.60	5.65	5.75	6.10	6.25	6.30
Deficiency payment rate	4.16	3.07	3.61	3.91	3.81	3.46	3.31	3.26

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

NOTES: CRP = Conservation Reserve Program; ARP = Acreage Reduction Program; CCC = Commodity Credit Corporation. See Glossary for an explanation of other terms.

a. Includes acres taken out of production by annual acreage reduction programs, including the 50/92 program, and base acres enrolled in the 10-year Conservation Reserve Program.

b. Free stocks are privately held stocks not being used as collateral for government loans.

one-third, and exports have fallen. About one-fifth of domestic use goes to the production of beer and about 2 percent is used for seed. The remainder, aside from a statistical discrepancy, is consumed as food.

Exports are expected to fall in 1991 to the lowest level since the mid-1980s. The 63.5 million hundredweight projection for exports in the 1991 crop year is significantly below the record 91.4 million hundredweight in 1980. Loss of the Iraqi market, previously the main overseas market for U.S. rice, has adversely affected U.S. exports. Higher production levels in the European Community and in Thailand also contributed to the reduction in U.S. exports.

Prices and Stocks

Stocks at the end of the 1990 crop year (July 1991) were 24.6 million hundredweight, the lowest level since 1980 and only 15 percent of total use. Stocks are expected to remain at that level at the end of the 1991 crop year, rise

somewhat in 1992 and 1993, and decline thereafter.

Rice prices are expected to rise in 1991 and then fall in 1992 as plantings and production increase. After 1992, however, prices are projected to climb each year, ranging from \$6.90 per hundredweight in 1992 to \$7.60 per hundredweight in 1997. Prices are not expected to reach the high levels of the early 1980s, though they are expected to remain above the loan rate throughout the baseline period.

Government Costs

Outlays for fiscal year 1991 were \$867 million, \$200 million more than the previous year (see Table 10). Higher deficiency payments for the final payment of the 1990 crop and higher loan costs caused the increase in outlays. The deficiency payment rate for the 1990 crop was \$4.16 per hundredweight, 60 cents more than a year earlier, and the marketing loan benefit averaged \$1.54 per hundredweight. (The marketing loan benefit represents the loss

Table 10.
Rice Program Outlays (By fiscal year, in millions of dollars)

	Actual 1991	Projected					
		1992	1993	1994	1995	1996	1997
Net Lending							
Loans made	956	708	881	887	892	896	765
Cash loans repaid	-647	-695	-749	-772	-792	-842	-808
Net Loans	309	13	133	116	100	54	-43
CCC Storage and Handling Costs	0	0	0	0	0	0	0
Direct Cash Payments							
Advance deficiency	215	220	245	239	217	208	204
Regular deficiency	328	234	318	337	329	298	285
Loan deficiency	14	15	27	25	20	11	7
Subtotal	557	469	590	601	566	517	496
Total Outlays	867	482	722	717	665	571	454

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

NOTE: CCC = Commodity Credit Corporation.

absorbed by the government as rice under loan is redeemed at world market prices below the loan rate.)

Sharply reduced loan costs and an expected low rate for deficiency payments cause projected outlays in fiscal year 1992 to decline substantially. The marketing loan benefit is expected to fall by 50 percent for the 1991 crop, with most of these outlays occurring in 1992. In later years, total projected outlays vary considerably, but CBO expects a downward trend after 1993 as prices rise and both the deficiency payment rate and the marketing loan benefit fall. Outlays could fall below \$500 million in 1997.

Cotton

The near-term outlook for upland cotton is for plentiful supply and weakening export demand and prices. Production increased by 13 percent in 1991 because of a low acreage reduction requirement and high prices during planting season. Domestic demand has remained strong, although export demand has shown some weakness in the 1991 crop year. Foreign producers with abundant supplies have aggressively cut prices to boost sales.

Government Programs

The 1990 farm bill established the target price for upland cotton at 72.9 cents per pound for the 1991 through 1995 crops. Although deficiency payments are offered to program participants, 15 percent of their crop acreage base is no longer eligible to receive payments because of program changes enacted in 1990. These unpaid flexible acres can be planted in program and nonprogram crops (other than fruits and vegetables). The announced advanced deficiency payment rate for the 1992 crop is 6 cents per pound and is available to producers when they enroll in the program.

The rate for price support loans continues to be set by formula, based on a moving average of spot-market cotton prices. For 1992, the upland cotton loan rate is set at 52.4 cents per pound. Marketing loan provisions had previously not been expected to affect outlays or markets because farm prices are generally projected to be above the loan rate. However, very low prices offered by U.S. competitors selling in Northern Europe have caused loan repayment rates as low as 40 cents per pound in recent months. Those low rates increase CCC outlays for marketing loan benefits and loan deficiency payments.

The 1990 farm bill requires the Secretary of Agriculture to establish acreage reduction requirements to achieve carryover stocks equal to 30 percent of estimated use. For the 1992 crop, the acreage reduction requirement has been set at 10 percent. For the 1992 crop year, CBO projects ending stocks at close to 30 percent of use.

Production

The 1992 crop of upland cotton is projected at 16.4 million bales, down 4 percent from 1991 (see Table 11). The 1991 crop was exceptionally large because of the low 5 percent acreage reduction requirement and new flexibility provisions allowing participating producers to plant portions of their noncotton base in cotton. In addition, yield was fairly high at 653 pounds per acre--well above the expected trend.

The acreage reduction requirement of 10 percent, announced for the 1992 crop, is expected to reduce plantings compared with 1991 but still allow for a fairly large crop. Because CBO projects that stocks will be replenished during the 1992 crop year, future acreage reduction requirements are projected at 15 percent to 17.5 percent, keeping the ratio of stocks to use near 30 percent.

Table 11.
Upland Cotton Supply and Use (By crop year)

	Actual	Projected						
	1990	1991	1992	1993	1994	1995	1996	1997
Millions of Acres								
Base Acres (Net of CRP)	14.38	14.63	14.80	14.90	15.00	15.05	15.11	16.16
Percentage of Base Acreage								
Acreage Reduction Program	12.5	5.0	10.0	17.5	15.0	15.0	15.0	15.0
Participation in ARP	87	84	86	84	86	86	86	86
Millions of Acres								
Total Idled Acres ^a	3.26	2.22	2.82	3.74	3.48	3.49	3.48	3.38
Acres Planted	12.11	13.90	13.20	12.51	12.85	12.79	12.95	13.10
Acres Harvested	11.50	12.60	12.43	11.78	12.11	12.05	12.20	12.34
Pounds per Acre								
Yield per Harvested Acre	632	653	635	640	650	660	670	680
Program Yield	592	592	592	592	592	592	592	592
Millions of Bales								
Supply								
Beginning stocks	2.80	2.26	3.99	4.88	4.76	4.95	4.98	5.08
Production	15.15	17.14	16.45	15.71	16.40	16.57	17.03	17.49
Total (Including imports)	17.95	19.41	20.44	20.59	21.16	21.52	22.01	22.57
Use								
Domestic mill	8.59	9.03	9.04	9.13	9.26	9.39	9.61	9.85
Exports	7.38	6.53	6.62	6.81	7.05	7.25	7.42	7.61
Total (Including stocks unaccounted for)	15.69	15.42	15.57	15.84	16.21	16.54	16.93	17.36
Ending Stocks	2.26	3.99	4.88	4.76	4.95	4.98	5.08	5.21
CCC-owned stocks	0	0	0	0	0	0	0	0
Outstanding CCC loans	0.22	1.67	2.31	2.19	2.18	2.21	2.25	2.37
Free stocks ^b	2.05	2.32	2.57	2.57	2.76	2.77	2.83	2.84
Dollars per Pound								
Prices								
Target price	0.729	0.729	0.729	0.729	0.729	0.729	0.729	0.729
Loan rate	0.503	0.508	0.524	0.539	0.534	0.536	0.517	0.512
Loan repayment rate	0.503	c	c	c	c	c	c	c
World price	0.681	c	c	c	c	c	c	c
Season-average price ^d	0.671	0.570	c	c	c	c	c	c
Calendar-year average price	0.656	0.628	c	c	c	c	c	c
Deficiency payment rate	0.073	0.101	0.143	0.146	0.146	0.149	0.151	0.158

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

NOTES: CRP = Conservation Reserve Program; ARP = Acreage Reduction Program; CCC = Commodity Credit Corporation. See Glossary for an explanation of other terms.

- Includes acres taken out of production by annual acreage reduction programs, including the 50/92 program, and base acres enrolled in the 10-year Conservation Reserve Program.
- Free stocks are privately held stocks not being used as collateral for government loans.
- Government agencies are prohibited from publishing projections of cotton prices.
- Price for 1991 is a weighted average based on marketings during the first eight months of the crop year; it is not a projection for the entire crop year.

Use

Domestic "mill-use demand" for cotton continues to be strong, as it has been for several seasons. For the 1991 crop, mill use is projected to be 5 percent more than in the previous year. In 1992 and later crop years, CBO projects continued increases, but at a slower pace than the growth experienced in 1991.

Foreign demand for the 1991 crop is showing signs of weakness: exports are projected to be down 11 percent from the 1990 season. For the 1992 crop, exports are expected to increase modestly. There are several reasons for that. Global demand for use in mills has been sluggish, and production levels in the foreign cotton-producing countries have been strong. Estimated production of cotton in China has recently been revised upward, and projected use is down. In recent months, high output in some South American countries and Pakistan, along with large supplies on hand in the

former Soviet Union, have caused weak prices in world markets.

Prices and Stocks

As expected, the large 1991 crop has broken the price strength that cotton showed. Strong foreign competition has helped lower recent prices. Current-year farm prices have averaged well below the season average of 67.1 cents per pound for the 1990 crop year.

Stocks of upland cotton on hand at the end of the 1991 crop year are projected at 4 million bales--76 percent more than the previous year. The Secretary of Agriculture is required to set acreage reduction requirements to maintain the ratio of stocks to use at 30 percent. Barring unforeseen demand or supply shocks, this will lead to carryover stocks of about 4.8 million to 5.2 million bales during the baseline period.

Table 12.
Upland Cotton Program Outlays (By fiscal year, in millions of dollars)

	Actual	Projected					
	1991	1992	1993	1994	1995	1996	1997
Net Lending							
Loans made	741	1,948	1,175	1,117	1,192	1,220	1,198
Cash loans repaid	<u>761</u>	<u>1,443</u>	<u>1,014</u>	<u>1,146</u>	<u>1,193</u>	<u>1,211</u>	<u>1,187</u>
Net Loans	-20	505	161	-29	-1	9	11
CCC Storage and Handling Costs	1	0	0	0	0	0	0
Storage Payments to Producers with Crop Under Loan	0	82	0	0	0	0	0
Direct Cash Payments							
Advance deficiency	213	314	270	288	295	300	334
Regular deficiency	197	317	415	387	413	422	430
Loan deficiency	<u>0</u>	<u>148</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	410	778	685	675	707	722	764
Other	-9	75	0	0	0	0	0
Total Outlays	382	1,440	846	646	707	731	775

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

NOTE: CCC = Commodity Credit Corporation.

Government Costs

Outlays for the cotton program are projected at \$1.4 billion in fiscal year 1992, almost triple those for 1991 (see Table 12). CBO expects that the recent weakening of cotton markets will lead to larger deficiency payments, greater net lending costs, the resumption of loan deficiency payments, and direct payments to users and exporters of U.S. cotton. Very low prices offered by competitors of the United States in the Northern European markets have caused loan repayment rates below the loan rate. That indicates that producers have gained benefits--at some cost to the government--from the marketing loan program.

Projected outlays for 1993 through 1997 are much lower than those projected for 1992. If higher prices materialize in the future, as expected, they will eliminate loan deficiency payments and marketing loan costs. In addition, net lending costs generally should be much lower because of the major stock rebuilding projected to occur during fiscal years 1992 and 1993. In later years, net lending costs are negligible.

Soybeans

The 1991 soybean crop was up 3 percent from a year earlier because of higher plantings and record yields. The season-average soybean price at the farm is projected to be down 4 percent--to \$5.52 per bushel--for the 1991 crop year. The lower prices and plentiful supplies have led to a projected record domestic crush and a 19 percent increase in exports.

CBO projects a 2 percent drop in the 1992 crop, with modest declines in plantings and yields. CBO also projects that domestic demand will remain strong during the 1992 crop year but that exports will decline. The season-average farm price is expected to increase by 1 percent to 2 percent each year

because increases in demand are projected to keep pace with supplies. Program outlays for soybeans are projected to rise to \$88 million in fiscal year 1992, with receipts from the loan origination fee partly offsetting increases in outlays for the nonrecourse loan program. In programs from 1993 through 1997, receipts are projected to exceed outlays as loans repaid exceed loans made and receipts from the origination fees continue.

Government Programs

The 1990 legislation raised the soybean loan rate from \$4.50 per bushel to \$5.02 and established loan rates for minor oilseeds at 8.9 cents per pound. The soybean and minor oilseed loans are marketing loans, which allow producers to repay at the loan rate or the market price--whichever is lower. Marketing loan benefits have accrued to some minor oilseed producers in fiscal year 1992. However, producers are required to pay a 2 percent fee if they choose to use the oilseed loan program.

Production

The 1991 soybean crop was 3 percent higher than a year earlier because of higher plantings and record yields (see Table 13). Average yield increased in 1991, reaching 34.3 bushels per acre harvested, despite late-summer concerns about dryness in much of the Midwest. The increase in planted acreage stemmed in part from the planting flexibility accorded by the 1990 farm bill and in part from spring rains that delayed corn planting, especially in Iowa. Plantings for the 1992 crop are projected to drop modestly from 1991 because market prices currently favor corn over soybeans. Because yield is projected to decline from the 1991 record, the 1992 crop is expected to fall by 2 percent from 1991. With modest growth in yields and with stronger soybean prices projected for subsequent years, production is projected to increase 1 percent to 2 percent annually over the rest of the baseline period.

Use

Soybean exports in the 1991 crop year are expected to increase 19 percent from the weak performance of the previous year. Export sales are up in all major markets, especially in the European Community. A severe drought in Brazil curtailed production by that major competitor. Buyers have therefore had to turn increasingly to the United States for imports. For the 1992 crop year and the following year,

as a larger South American crop brings in more export competition, exports are expected to drop somewhat from this year's high level.

CBO expects the domestic crush of the 1991 soybean crop to reach a record level and remain strong throughout the baseline period. Because of lower exports, total use is projected to drop 1 percent during the 1992 crop year but is projected to increase between 0.6 percent and 1.5 percent in each year thereafter.

Table 13.
Soybean Supply and Use (By crop year)

	Actual 1990	Projected						
		1991	1992	1993	1994	1995	1996	1997
Millions of Acres								
Acres Planted	57.8	59.1	58.6	59.1	59.5	59.5	59.7	60.0
Acres Harvested	56.5	58.0	57.5	58.0	58.4	58.4	58.6	58.9
Bushels per Acre								
Yield per Harvested Acre	34.0	34.3	33.8	34.1	34.5	34.8	35.2	35.5
Millions of Bushels								
Supply								
Beginning stocks	239	329	322	295	290	294	299	306
Production	1,926	1,986	1,945	1,980	2,015	2,035	2,060	2,093
Total	2,167	2,320	2,271	2,279	2,308	2,333	2,363	2,403
Use								
Crushings for oil	1,187	1,241	1,245	1,260	1,275	1,284	1,294	1,306
Seed, feed, and residual	94	95	95	95	95	95	95	95
Exports	557	662	636	634	643	654	668	687
Total	1,838	1,998	1,977	1,989	2,014	2,034	2,057	2,088
Ending Stocks								
CCC-owned stocks	0	0	0	0	0	0	0	0
Outstanding CCC loans	33	48	45	40	35	30	25	20
Free stocks ^a	296	274	250	250	259	269	281	295
Dollars per Bushel								
Prices								
Season-average price	5.75	5.52	5.57	5.61	5.65	5.77	5.85	5.89
Loan rate	4.50	5.02	5.02	5.02	5.02	5.02	5.02	5.02

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

NOTE: CCC=Commodity Credit Corporation.

a. Free stocks are privately held stocks not being used as collateral for government loans.

Prices and Stocks

Stocks carried into the 1991 crop year were up 38 percent from the preceding year. Added to the effect of a large crop, that carryover is putting pressure on the soybean price, with the price projected to drop 4 percent from the preceding year. Ending stocks are projected to be only slightly lower. With a smaller harvest and marginally smaller total use of the 1992 crop, CBO projects that ending stocks will decline by 9 percent. The season-average farm price for the 1992 crop is projected to increase about 1 percent from the year before and to continue to rise by about the same percentage each year for the rest of the baseline period.

Government Costs

The 2 percent loan origination fee that began with the 1991 crop has probably reduced the volume of loans soybean producers have taken out. That trend toward reduced loan volume is likely to continue in the later years of the projection period. CBO projects that outlays for the soybean program will rise to \$88 million in fiscal year 1992, with receipts from the loan origination fee partly offsetting increases in net lending (see Table 14). In the 1993

through 1997 programs, CBO projects that receipts will exceed outlays as rising soybean prices reduce the incentive to use the loan program. The origination fees are projected to continue generating receipts of \$17 million to \$21 million per year, and loans repaid are projected to exceed loans made.

Dairy

After displaying extraordinary strength during the first three quarters of 1990, the average price received for milk at the farm--the "all milk price"--fell sharply in the final months of the calendar year. Despite the late-year weakness, the 1990 average price reached a record \$13.78 per hundredweight. For calendar year 1991, the all milk price averaged 11 percent lower than in 1990, about the same as it did in 1988. The 1992 average price is projected to be about the same as that for 1991.

Net removals of milk from the commercial market by the federal government in fiscal year 1991 were equivalent to more than 10 billion pounds of milk on a "milkfat basis" and more than 4 billion pounds on a "nonfat-solids

Table 14.
Soybean Program Outlays (By fiscal year, in millions of dollars)

	Actual	Projected					
	1991	1992	1993	1994	1995	1996	1997
Net Lending							
Loans made	1,070	1,042	1,074	994	1,011	919	827
Cash loans repaid	-1,030	-934	-1,089	-1,019	-1,036	-944	-852
Net Loans	39	108	-15	-25	-25	-25	-25
Loan Origination Fee	0	-20	-21	-20	-20	-18	-17
Other	1	0	0	0	0	0	0
Total Outlays	40	88	-37	-45	-45	-43	-42

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

basis."⁴ Relatively small amounts of cheese were purchased, but butter and nonfat dry milk removals were substantial.

At \$839 million, outlays for the 1991 dairy program were 66 percent higher than the relatively low outlays for the 1990 program. For fiscal year 1992, outlays are projected to decrease to \$341 million--the result of a decline in CCC purchases caused by demand expanding more than production.

Government Programs

The minimum support price for milk was set at \$10.10 per hundredweight in the 1990 farm law. The Secretary of Agriculture is directed to project net removals annually. The support price must be increased if projected net removals fall below 3.5 billion pounds milk equivalent on a "total milk-solids basis."⁵ The support level for milk could return to the minimum in any year during which removals were projected to exceed 5 billion pounds. In the CBO baseline, the support price remains at \$10.10 per hundredweight through 1997 because projected net removals on a total milk-solids basis never fall below 3.5 billion pounds.

The 1990 farm law also provides for producers to pay an assessment if net removals in the calendar year are projected above 7 billion pounds milk equivalent on a total milk-solids basis. Under the CBO baseline, that assessment would not be triggered because net removals projected for each calendar year do not exceed 7 billion pounds. The Omnibus Budget Reconciliation Act of 1990 provides for other producer assessments of 5 cents per hundredweight in 1991 and 11.25 cents per hundredweight in subsequent years.

4. For measurement purposes, different kinds of dairy products can be converted into equivalent units based on their milkfat content ("milk equivalents, milkfat basis"), their nonfat-solids content ("milk equivalents, nonfat-solids basis"), or both ("milk equivalents, total milk-solids basis"). Statistics reporting the production

In January 1992, the purchase price of butter was lowered 11 cents to 87.25 cents a pound, and the purchase price of nonfat dry milk was raised 6.2 cents to 91.2 cents a pound. Those adjustments were in response to an observed imbalance in surplus between fat solids and nonfat solids.

Production

Milk production is projected to rise despite a gradual decline in the number of cows; the rise will result from an increase in milk production per cow (see Table 15). CBO projects that production in 1992 will increase by about 1 percent as the domestic herd declines slightly and milk production per cow increases by 2 percent.

For the remainder of the baseline period, CBO projects that the cow herd will decline steadily--by about 3 percent over the entire 1992-1997 period. Milk production per cow is projected to increase at an even pace over the same period, reaching a total increase of about 11 percent. Production levels in 1997 are projected to be about 8 percent greater than in 1992.

Use

The commercial use of all milk on a milkfat basis was sluggish in 1991, lagging well behind levels of a year earlier until the July-September quarter. For all of fiscal year 1991, use was down about 1 percent. For the baseline projections, commercial use is projected to increase with population growth and declining real prices of dairy products. Use is projected to increase by more than 3 percent in 1992, as

and use of milk are traditionally expressed in milk equivalents, milkfat basis. The 1990 farm law requires that government removals of dairy products from the commercial market be expressed in milk equivalents on a total milk-solids basis.

5. The total milk-solids basis accounts for the nonfat solids--as well as the milkfat--in the products removed.

Table 15.
Dairy Supply and Use, and Dairy Program Outlays (By fiscal year, in millions of dollars)

	Actual 1991	Projected					
		1992	1993	1994	1995	1996	1997
Supply							
Herd Size (In millions)	10.104	9.977	9.941	9.897	9.835	9.768	9.681
Yields (Cwt per cow)	147.17	150.33	153.34	156.64	160.00	163.44	166.96
(Billions of pounds)							
Beginning Commercial Stocks	5.2	5.3	5.3	5.3	5.3	5.3	5.3
Production	148.7	150.0	152.4	155.0	157.4	159.7	161.6
Imports	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Total	156.4	157.8	160.2	162.8	165.2	167.5	169.4
Use (Billions of pounds)							
Commercial	138.7	143.8	145.7	148.7	151.2	153.8	155.6
Farm Use	2.0	2.1	2.1	2.1	2.1	2.1	2.1
CCC Net Removals ^a	10.4	6.6	7.1	6.8	6.5	6.3	6.4
Ending Commercial Stocks	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Prices (Dollars per cwt)							
Support Price	10.10	10.10	10.10	10.10	10.10	10.10	10.10
All Milk Price ^b	12.24	12.25	11.81	12.00	12.04	12.17	12.04
Outlays (Millions of dollars)							
Purchases	757	499	639	592	582	559	588
Dairy Termination Program	96	13	0	0	0	0	0
Other	119	86	94	90	90	82	83
Subtotal	972	598	734	682	672	641	670
Assessments ^c	44	136	169	172	175	177	179
Other Receipts	89	121	143	143	143	143	143
Subtotal	133	257	313	315	318	321	323
Net CCC Outlays	839	341	421	366	354	320	348

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

NOTES: Cwt = hundredweight; CCC = Commodity Credit Corporation.

- a. Net amount purchased and subsidized for export (measured as milk equivalents on the basis of milkfat content) for the purpose of supporting the price of milk.
- b. Average price farmers received for milk.
- c. Offsetting receipts from farmers; based on sales of milk.

the economy improves, and by an additional 8 percent over the remaining baseline period.

Prices and Stocks

The all milk price fell by 18 percent from August 1990 through December 1990 and continued to decline through July 1991. The price then rebounded strongly and steadily through December 1991, although the prices of manufactured dairy products slipped during the October-December period. The average monthly Minnesota-Wisconsin (M-W) price for manufacturing-grade milk followed that pattern as well. (The M-W price is a competitive price paid for manufacturing-grade milk in the two states.) In 1992, the M-W price continued to decline through March but remained well above levels of a year earlier. The M-W price posted an increase in April.

For 1991, the all milk price was \$12.24, down 11 percent from 1990. The annual 1992 milk price is projected to remain about the same. The all milk price is projected to remain near \$12.00 per hundredweight for the rest of the baseline period.

Government Costs

At \$839 million, outlays for the 1991 dairy program were up 66 percent from the relatively low outlays for the 1990 program--which were the lowest since 1979. For 1992, outlays are projected to decrease to \$341 million, with demand expanding more than production and CCC purchases declining. For the rest of the baseline period, net outlays are expected to stay relatively low. (Only in 1993 are they expected to exceed \$400 million.) Some of the decline in CCC purchase costs is attributable to a shift in accounts, as the Department of Agriculture's Food and Nutrition Service has started purchasing dairy products under its own budgetary account. Also, products exported with subsidies under the Dairy Export Incentive Program are counted as net removals. Those changes have led to a projec-

tion of lower CCC purchases of dairy products starting in 1992, although the shifted purchases still count as net removals.

Net removals in 1991 were equivalent to more than 10 billion pounds of milk on a milk-fat basis and more than 4 billion pounds on a nonfat-solids basis. Relatively small amounts of cheese were purchased, but butter and nonfat dry milk removals were substantial. As milk supplies tightened and use improved during the second half of 1991, CCC purchases fell sharply, although substantial shipments of nonfat dry milk were removed under the Dairy Export Incentive Program. In 1992, butter purchases have about kept pace with levels of a year earlier, but cheese and nonfat dry milk purchases are running well below those levels.

Land Use

Overall, planted acreage for the major supported crops is expected to rise to 245 million acres in 1992, 8 million acres above last year's figure and slightly above the 1990 level (see Table 16). Although an overall increase is expected in 1992, plantings in two of the major crops--soybeans and cotton--are expected to decline. The largest increase is expected in wheat--up by more than 5 million acres. Acreage idled under the 1992 acreage reduction, 0/92, and 50/92 programs is expected to fall in all crops except cotton.

The biggest change is in wheat, with land idled falling by almost 50 percent as the acreage reduction requirement drops from 15 percent to 5 percent of base acreage. The total acreage idled under these programs is expected to decline by more than 9 million acres. The total planted acreage for the major program crops is expected to remain at around 245 million acres through 1995; after that, planted acreage is expected to rise as Conservation Reserve Program contracts expire.

Table 16.
Land Committed to the Major Supported Crops (By fiscal year, in millions of acres)

	Actual	Projected					
	1991	1992	1993	1994	1995	1996	1997
Acreage Planted in Major Crops							
Corn	76.0	78.6	77.6	77.3	77.7	78.5	80.2
Sorghum, Barley, and Oats ^a	24.7	25.6	25.6	25.8	26.0	26.3	27.2
Soybeans	59.1	58.6	59.1	59.5	59.5	59.7	60.0
Sunflowers and Other Minor Oilseeds ^b	3.1	3.1	3.1	3.2	3.2	3.2	3.3
Wheat ^c	57.7	63.0	63.2	63.1	62.2	64.9	66.5
Upland Cotton	13.9	13.2	12.5	12.9	12.8	13.0	13.1
Rice	2.9	3.1	3.1	3.1	3.1	3.1	3.1
Subtotal	237.4	245.2	244.2	245.0	244.6	248.7	253.4
Acreage Idled Under Annual Programs							
Corn	7.4	5.8	5.9	5.8	5.7	5.9	7.0
Sorghum, Barley, and Oats	4.9	4.2	3.9	3.9	3.8	4.0	4.4
Wheat	15.4	7.9	7.9	7.9	7.9	5.1	6.8
Upland Cotton	0.9	1.5	2.4	2.2	2.2	2.2	3.1
Rice	0.7	0.4	0.4	0.4	0.4	0.4	0.4
Subtotal ^d	29.3	19.9	20.5	20.1	20.0	17.6	21.7
Cropland Enrolled in the Conservation Reserve Program^e							
Corn	3.9	4.1	4.3	4.5	4.7	4.4	2.6
Sorghum, Barley, and Oats	6.5	6.6	6.6	6.7	6.3	5.8	4.8
Wheat	10.4	10.8	11.3	11.7	12.3	11.7	8.2
Upland Cotton	1.3	1.3	1.3	1.3	1.3	1.3	0.3
Other	12.3	12.8	13.3	13.9	15.2	14.6	8.2
Subtotal	34.4	35.6	36.8	38.1	39.8	37.8	24.1
Total	298.0	297.6	298.5	300.0	301.2	300.9	295.9

SOURCES: Data from Department of Agriculture; projections from February 1992 baseline of the Congressional Budget Office.

- a. Acres of oats harvested are included in this total.
- b. Next to sunflowers, flaxseed has the largest planted acreage of the minor oilseeds.
- c. Acres of winter wheat harvested are included in this total.
- d. Includes land idled in the annual acreage reduction program and in the 0/92 and 50/92 programs.
- e. CRP acreage attributed to the program crops is base acreage only.

By 1995, the CRP is expected to have nearly 40 million acres of cropland idled under long-term contracts, an increase of nearly 6 million acres from the 1990 level. To accommodate those increases, CBO projects that the Secretary of Agriculture will reduce acreage

reduction requirements rather than allow the area planted in program crops to fall. As a result, land idled under annual programs is expected to fall most years of the projection period.

Glossary

Acreage Reduction Program (ARP): A program in which producers agree not to plant part of their crop acreage base in the supported crop. Participation is voluntary and unpaid, but producers must participate to receive deficiency payments and other program benefits. Percentages of reductions are announced annually by the Secretary of Agriculture, who is empowered to adjust the percentages within specified ranges based on a commodity's stocks-to-use ratio.

Base Acreage: Acreage that would "normally" be planted in a crop. The base acreage for a crop is calculated as the average of acreage planted and considered planted in the crop during the past three to five years (the number of years included differs by crop). Land considered planted acreage includes that idled under government programs, that which could not be planted because of natural disaster, and unpaid flexible acreage.

Commodity Credit Corporation (CCC): A wholly owned government corporation created in 1933 to stabilize and support farm income and prices. Most of the activities of the corporation are carried out by the Agricultural Stabilization and Conservation Service of the U.S. Department of Agriculture. Activities of the CCC are financed through borrowing from the U.S. Treasury and appropriations made to reimburse the CCC for losses realized in its operations.

Conservation Reserve Program (CRP): A long-term land retirement program whose objectives include reducing soil erosion, improving water quality, and increasing tree planting. Landowners receive annual rental payments and assistance in putting an approved vegetative cover on the land in exchange for agreeing to devote it to soil-conserving uses during the term of the contract. The 1990 farm bill allows contracts of 10 to 15 years' duration for land placed in a conserving use and longer periods for land devoted to trees. The federal budget accounts for the CRP separately from the CCC.

Crop Years or Marketing Years: The 12-month periods, beginning around harvest time, during which a crop is marketed. The wheat crop year begins in June, the rice and cotton crop year in August, and the corn and soybean crop year in September. The crop year is identified by the calendar year in which the crop is harvested. The 1990 wheat crop, for example, is harvested during calendar year 1990, even though most of it was planted during the fall

of 1989; the 1990 wheat crop year, therefore, extends from June 1990 through May 1991.

Deficiency Payment: A direct payment made to participating producers when the average market price of a crop falls below its target price. The total deficiency payment, which can be paid in a combination of generic commodity certificates and cash, equals the product of the producer's payment acres, program yield, and the deficiency payment rate. Generally, the deficiency payment rate equals the difference between the target price and the greater of the market price and the nonrecourse loan rate.

Export Credit Guarantee Program: A program offering short-term (GSM-102) and intermediate-term (GSM-103) export credit guarantees to financial institutions that extend credit to approved foreign purchasers of U.S. agricultural exports. Typically, the guarantees cover 98 percent of the loan principal and part of the interest rate. Defaulted loans become direct loans of the U.S. government. In accordance with the Budget Enforcement Act of 1990, the outlays associated with these programs are no longer included under the broad umbrella of CCC commodity outlays.

Export Enhancement Program (EEP): A program offering subsidies to allow U.S. agricultural commodities--mostly wheat--to be sold to certain foreign purchasers at prices below U.S. market prices. The program was designed primarily to compete directly with the European Community's subsidized grain sales. Subsidies can be paid in generic commodity certificates or cash.

Farmer-Owned Reserve (FOR): A storage program designed to ensure adequate stock levels to dampen sharp price fluctuations in wheat and feed grains. The Secretary of Agriculture can open the reserve to wheat or feed grains for a specific crop year; the Secretary's decision is based on market prices and measures of the adequacy of existing stocks. If opened, farmers can extend nonrecourse loans and place their grain in storage, usually on their own farms. The CCC makes quarterly storage payments to farmers for grain held in the reserve. Farmers can remove their grain from storage at any time by repaying the loan, or they can exchange grain for generic commodity certificates.

Food Security Reserve: A minimum of 147 million bushels of wheat intended to enable the United States to respond to unanticipated food emergencies in developing countries. The food security reserve can be maintained either through annual forfeitures in the nonrecourse loan program or through open-market purchases.

Generic Commodity Certificates: Negotiable, dollar-denominated certificates that CCC program participants receive in lieu of cash payments. Generic certificates can be used to redeem outstanding regular or reserve nonrecourse loans and exchanged for CCC-owned stocks--or, in some cases, cash.

GSM-102 and GSM-103: See Export Credit Guarantee Program.

Loan Origination Fee: A fee charged at the time a commodity is placed under loan. The Omnibus Budget Reconciliation Act of 1990 (OBRA-90) established fees for soybeans and other oilseeds.

Loan Rate: *See* Nonrecourse Loans.

Marketing Assessment: A payment made to the CCC for each marketed quantity of specified commodities. Such commodities include milk, peanuts, sugar, honey, and tobacco. Malting barley that program participants produce is also assessed. For wool and mohair, an assessment is subtracted from the payments made to the producer.

Marketing Loan Program: A program in which a producer may repay a nonrecourse commodity loan at a per-unit rate that is lower than the rate used to compute the value of the loan when granted. For example, a rice grower can place one hundredweight of rice under loan and receive the nonrecourse loan rate of \$6.50. If the world market price, adjusted to the farm level, turns out to be less than \$6.50 per hundredweight--say, \$5.00--the producer can satisfy the terms of the loan and regain clear title to the crop by paying \$5.00 to the CCC. Marketing loans protect farmers' returns while reducing or eliminating the price-supporting function of the nonrecourse loan program. Participants are limited to \$75,000 in marketing loan benefits per crop year.

Marketing Years: *See* Crop Years.

Nonrecourse Loans: Loans offered to producers participating in CCC programs for wheat, feed grains, soybeans, other oilseeds, cotton, rice, sugar, and honey. When a loan is made, the producer's crop is pledged as collateral, and the total amount of the loan equals the amount of crop pledged times the *nonrecourse loan rate*. These are nonrecourse loans because the commodity can be forfeited to satisfy the loan fully, even if its market price has fallen below the nonrecourse loan rate. Producers can repay their loans with cash or, in effect, with generic commodity certificates. The law specifies the formula for the *basic loan rate*. The *announced loan rate* in wheat and feed grains is the final rate used; depending on the commodity's stocks-to-use ratio, it may fall below the basic rate.

Normal Flexible Acres: The 15 percent of farm base acreage on which no deficiency payments are made. A farmer can plant any crop except fruit or vegetables on that acreage and not lose crop acreage base or be penalized in terms of program benefits. On those unpaid flexible acres, the farmer will make the planting decision based on relative market returns for the program crop and alternative crops. (*See* Triple Base.)

Optional Flexible Acres: The option to plant an alternative crop on as much as 10 percent of base acres, in addition to the 15 percent allotted to normal flexible acres. However, the farmer must forfeit deficiency payments that would otherwise be earned by planting the program crop on those acres. On optional flexible acres, the potential program payment will figure in the planting decision.

Payment Acres: Acres on which a farmer who participates in the annual commodity programs is eligible to receive deficiency payments. The participating farmer is eligible for payments on total base acres minus three types of acreage: unpaid acres idled under an acreage reduction program, unpaid normal flexible acres, and optional flexible acres on which alternative crops are planted. Producers receive payments only on acres planted to the program crop up to the maximum eligible level. Payments can be received on unplanted acres only under the 50/92 and 0/92 programs or if bad weather prevents planting.

Payments Limitation: The limitation on the annual amount of farm program payments (excluding loans) that any individual can receive. The current limitation is \$50,000 per "person"--meaning either an individual or a corporation. An individual can receive up to \$100,000 by collecting \$50,000 as an individual and \$25,000 for each 50 percent shareholding in a maximum of two corporate entities. The maximum payment can only be collected by operators of relatively large farms who are actively engaged in the business and who have organized it to maximize benefits. Marketing loan benefits and deficiency payments made as a result of lowering the loan rate below the basic loan rate are subject not to the \$50,000 limitation but to a limit of \$75,000 per person. A separate \$50,000 limit applies to CRP rental payments.

Posted County Price (PCP): A price used to convert the dollar-denominated generic certificates into quantities of a commodity. PCPs are set for each county based on actual prices in such major grain markets as Kansas City, Portland, and Chicago.

Program Yield: A yield figure assigned to each farm and used to determine program payments. Current program yields are calculated as the average of program yields during 1981 through 1985, with the highest and lowest years removed.

Target Price: A price level established by law to calculate deficiency payments for wheat, feed grains, cotton, and rice.

Triple Base: A provision of OBRA-90 requiring that 15 percent of the participant's base acreage be excluded from payment eligibility. This provision takes its name because it defines three components of the base acreage: the 15 percent exclusion, acreage idled in compliance with an acreage reduction program, and the remaining eligible base. (See Normal Flexible Acres.)

50/92 and 0/92: Provisions in the farm law allowing producers to receive 92 percent of their deficiency payments even though they plant as little as 50 percent or none, respectively, of the payment acreage in the crop program; 50/92 is available to cotton and rice producers, 0/92 to wheat and feed grain producers. Before enactment of the 1990 farm bill, such acreage had to be devoted to conservation uses. Since 1991, however, producers may plant minor oilseeds (sunflower, flaxseed, canola, and others) on 0/92 acres; but to do so, they must give up either their deficiency payments or eligibility for the oilseed marketing loan.

RELATED CBO STUDIES

The Outlook for Farm Commodity Program Spending, Fiscal Years 1991-1996, June 1991.

The Outlook for Farm Commodity Program Spending, Fiscal Years 1990-1995, April 1990.

Farm Program Flexibility: An Analysis of the Triple Base Option, December 1989.

Agricultural Progress in the Third World and its Effect on U.S. Farm Exports, May 1989.

The GATT Negotiations and U.S. Trade Policy, June 1987.

Questions about these studies should be directed to CBO's Natural Resources and Commerce Division at (202) 226-2940. The Office of Intergovernmental Relations is CBO's Congressional liaison office and can be reached at 226-2600. Copies of the studies may be obtained by calling CBO's Publications Office at 226-2809.

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