the stocks-to-use adjustment but, so far, has not affected wheat's loan rate calculations.[6] The second adjustment can be made at the Secretary's discretion to maintain competitiveness by reducing loan rates up to an additional 10 percent. The effective wheat loan rate for crop year 1995 was announced at $2.58. The Secretary decided to keep the loan rate equal to the prior year.

Marketing Loan Provisions

The Omnibus Budget Reconciliation Act of 1990 requires that marketing loan provisions of the Agricultural Act of 1949, as amended, be implemented for the 1993-95 wheat crops. This requirement was triggered because there was no agricultural trade agreement under the GATT by June 30, 1992. While not a GATT requirement, provisions for loan deficiency payments were also implemented beginning with the 1993 wheat crop.

Under the marketing loan provisions, the Secretary may offer wheat producers the option to repay price support loans at a rate lower than the announced loan rate in order to minimize potential loan forfeitures, to minimize the accumulation of stocks, and to allow crops to be marketed freely and competitively worldwide. Producers may take out a regular wheat loan from the Commodity Credit Corporation at the county loan rate. If the posted county price (PCP), a proxy for the local market price, is less than the loan rate principal plus interest on a producer's loan, the producer can repay the loan at the PCP. The difference between the outstanding loan principal and the PCP is called a "marketing loan gain." If a marketing loan gain is earned, all of the interest otherwise owed is forgiven. If the PCP is below the outstanding loan principal plus interest but above the outstanding loan principal, a producer may still benefit by having some of the interest otherwise owed forgiven.

Loan deficiency payments are available to producers who are eligible to receive price support loans but who agree to forgo obtaining such a loan. This payment equals the difference between the announced county loan rate and the PCP on a given day times the quantity of wheat for which the loan deficiency payment is requested or otherwise eligible to be placed under loan.

Deficiency Payments and Target Prices

Deficiency payments received by producers are the product of a national payment rate, the producer's program payment yield, and the producer's payment acres.

Payment Rate

The regular deficiency payment rate is generally based on the difference between a target price and the higher of market price or the basic loan rate. Based on the 1990 Act, the Secretary of Agriculture sets the target price for wheat at the statutory minimum level of $4.00 per bushel for the 1991 through 1995 crops. The OBRA of 1990 changed the market price used for 1994 and 1995 crop years from that used for 1991-93 crop years.

The market price for 1991-93 crop years was defined to be the 5-month price received by producers for all-wheat during the first 5 months of the marketing year. The market price for 1994 and 1995 crop years was defined to be the lower of the 5-month price plus 10 cents or the 12-month price received by producers for all-wheat during the 12 months of the marketing year. The formula used for 1994 and 1995 is expected to reduce program expenditures.

The Findley deficiency payment rate, when the season average market price is less than the basic loan rate, is computed the same for all crop years, 1991 through 1995. The formula for this rate is the basic loan rate less either the higher of the 12-month price or the announced loan rate.

Program Payment Yields

Program payment yields are continued at the 1990 crop level. Program payment yields in 1990 reflected the simple average of program yields for 1981-85, except a farm's yield could not be less than 90 percent of its 1985 yield. A farm's program yields for 1981-85 reflected varying combinations of proven yields and administratively determined yields.

The 1990 Act provided discretionary authority for an alternative yield calculation. Program payment yields could have been established under the 1990 Act based on an average of the harvested yield for the preceding 5 years (dropping the years with the highest and lowest yield and any year in which a crop was not planted). This alternative was not exercised, in part, because of potential budget impacts.

[6]The minimum rate test may limit adjustments based on the stocks-to-use ratio by a statutory minimum of $2.44 per bushel. If 80 percent of the 5-year moving average, deleting high and low years, is less than the statutory minimum of $2.44 per bushel, the stocks-to-use adjustment is used. But if 80 percent of the 5-year moving average is greater than the statutory minimum, the greater of the statutory minimum or stocks-to-use adjustment is used.

Payment Acres

Generally, payment acres for a producer are the acres planted to wheat up to the producer's maximum payment acres. Maximum payment acres equal a producer's base acreage less reduced or idled acres less normal flex acres (15 percent of the base). Producers who under-plant (or plant to selected other crops) their maximum payment acres may receive deficiency payments on a portion of their under-planted acres through the 0-85/92 program.

The Secretary of Agriculture is required to advance 40-50 percent of projected deficiency payments when an acreage reduction program is in effect. Payments are made shortly after a producer signs an "intention to participate" form at the Consolidated Farm Service Agency office. If the advance payment exceeds the earned deficiency payment, the producer must repay the difference.

Acreage Reduction Programs

If excess supplies are projected by the U.S. Department of Agriculture, acreage reduction programs (ARP) are required and paid land diversion programs (PLD) are permitted. Producers must comply with the announced ARP level and other requirements in order to receive program benefits. When an ARP is in effect, producers are required to idle (or if certain optional program provisions are implemented, plant to selected minor crops) acres equal to the ARP percentage times their crop acreage bases.

The 1990 Act set the 1991 ARP level for wheat at not less than 15 percent. For 1992 through 1995, the 1990 Act established that ARP levels were to be chosen from statutory ranges based on the prior year's ending stocks-to-use ratio. If the prior-year stocks-to-use ratio was greater than 40 percent, USDA was required to announce an ARP level chosen from the range of 10 to 20 percent. If the prior-year stocks-to-use ratio was less than or equal to 40 percent, USDA was authorized, but not required, to announce an ARP level chosen from the range of 0 to 15 percent.

OBRA 1990 established minimum wheat ARP levels for 1992 through 1995 crop years of 6, 5, 7, and 5 percent, unless the prior-year stocks-to-use ratios were less than 34 percent. Under the 1992 GATT triggers of OBRA 1990, USDA was allowed to waive minimum ARP requirements. OBRA 1993 removed the authority for USDA to waive minimum ARP's. Removing this authority was not a problem because prior-year stocks-to-use ratios were less than 34 percent so the minimum ARP's of OBRA 1990 were not effective for any of the years. Announced ARP levels were 5 percent for 1992 and 0 percent for 1993 through 1995.

The Secretary of Agriculture may implement a Paid Land Diversion (PLD) whether or not an ARP is in effect, if a PLD will assist in adjusting the total national acreage to desirable goals. PLD payments may be set through bids submitted by producers or through other acceptable means approved by the Secretary. The last time a PLD was used for wheat was 1986.

Planting Flexibility Provisions

Producers may plant any eligible flex crop on up to 25 percent of any participating program crop's acreage base. This acreage is known as "flex" acreage, and the planting can be credited as "considered planted" to the program crop. The first 15 percent of the flex acreage is known as "normal flex acreage" (NFA) and the remaining 10 percent is known as "optional flex acreage" (OFA).

Normal flex acres are not eligible for deficiency payments, regardless of what crop, including the original program crop, is planted. However, program crops or oilseeds planted on NFA are eligible for price support loans. If optional flex acreage is planted to the original program crop, it is eligible for deficiency payments, but not if it is planted to another crop. However, other program crops or oilseeds planted on OFA are eligible for price support loans.

Normal flex acres are part of the calculation of maximum payment acres—the maximum acres on a farm that are eligible to receive deficiency payments. Maximum payment acres are defined as a farm's crop acreage base less acres idled under an ARP or PLD, and normal flex acres.

0-85/92

Wheat producers have the option of under-planting their maximum payment acres and receiving deficiency payments on a portion of the under-planted acres (0-85/92). Wheat producers may devote all or a portion of their maximum payment acres to conservation uses or approved nonprogram crops and receive guaranteed deficiency payments on the acres. The payment rate is guaranteed to be at least the projected deficiency payment rate.

The Omnibus Budget Reconciliation Act of 1993 provided for budget savings by changing the 0/92 provisions to 0-85/92. Producers who want to participate in the new "standard" 0/85 program have to idle or plant to selected crops at least 15 percent of their

maximum payment acres to be eligible for guaranteed deficiency payments on up to 85 percent of the maximum payment acres. Under certain conditions, producers may under-plant their wheat acres and receive payments on up to 92 percent of their maximum payment acres. These conditions include if they plant minor oilseeds, sesame, crambe, or "industrial and other crops"; if they are prevented from planting; or if they have failed acres.

Other Major Provisions

Other major provisions of the 1990 FACT Act include the Farmer-Owned Reserve, payment limitations, disaster payments, Environmental Conservation Acreage Reserve Program, and the Export Enhancement Program.

Farmer-Owned Reserve

The 1990 Act established new rules for the Farmer-Owned Reserve (FOR), which is opened when supplies are abundant and/or prices are low. Under the FOR, producers may extend a CCC 9-month loan beyond its regular term and receive storage payments for the extended period of time. Consequently, producers may store wheat when prices are low and market later when prices are higher.

Opening of the reserve program is announced each year by December 15 based on two market-based triggers: (1) the average price for the 90 days preceding the entry announcement is less than 120 percent of the national-average loan rate and (2) the projected ending stocks-to-use ratio for the marketing year is greater than 37.5 percent. If both conditions are met, USDA must open the FOR; if one condition is met, USDA may open the FOR; and if neither condition is met, USDA lacks authority to open the FOR. The maximum quantity of wheat allowed in the FOR is chosen from a range of 300 to 450 million bushels.

Entry into the reserve requires wheat to initially be under a regular 9-month loan until maturity. Producers may repay FOR loans at any time but no later than 27 months after the expiration of the original loan. One 6-month extension of the reserve period may be authorized by the Secretary of Agriculture. By statute, the FOR loan rate must be at least as high as the 9-month loan rate. Since the new rules of the 1990 Act, the FOR loan rate has been at the same rate as the 9-month loan rate.

Storage payments on wheat in the FOR are earned unless the market price reaches 95 percent of the current target price. At such time payments cease and are not reinstated until the market price is less than 95 percent of the target price for 90 days. Storage payments are made at the end of each quarter at a rate of $0.265 per bushel per year. By statute, USDA may charge (by regulation USDA will charge) interest on FOR loans when market prices equal or exceed 105 percent of the target price. Since the new rules of the 1990 Act, wheat storage payments have been stopped twice but interest has never been charged on FOR loans.

The FOR was opened for 1990-crop wheat and has not been opened for later crops. As of December 1994, the FOR does not contain any wheat for the first time since the FOR was established in 1977.

Food Security Wheat Reserve

The Food Security Wheat Reserve, created to provide a reserve of up to 4 million metric tons of wheat for emergency food needs in developing countries, was extended through 1995. If stocks are withdrawn, the Secretary of Agriculture must replenish stocks within 18 months of release to the extent that undesignated CCC inventories are available or funds are specifically appropriated for replenishment.

Payment Limitations

For each of the 1991-95 crops, the total amount of payments a person with an interest in only one farming entity may receive under one or more of the annual commodity programs (including oilseeds) may not exceed (1) $50,000 for deficiency and diversion payments; (2) $75,000 for gains realized from repaying a loan at a lower level than the original loan level, loan deficiency payments, and any Findley deficiency payments; and (3) $250,000 for the above two limits and any payment for resource adjustment (excluding diversion payments) or public access for recreation, and any inventory reduction payments. Total disaster payments are limited to $100,000.

Environmental Conservation Acreage Reserve Program (ECARP)

The ECARP is composed of the Conservation Reserve Program (CRP) and the Wetlands Reserve Program (WRP) (*13*). USDA is authorized to enroll 38 million acres into the CRP by the end of the 1995 calendar year and about 1 million acres into the WRP by 2000. This includes about 34 million acres enrolled in the CRP during 1986-90. The 1990 Act authorizes the Secretary of Agriculture to extend contracts, authorize new 10-15 year contracts, and purchase new easements during 1995-2000. In addition to CRP payments, producers may receive cost-share assistance and rental payments or tax benefits from State and other entity programs for enrolling land in the reserve programs. The objec-

tives of CRP were to reduce soil erosion, improve water quality, control supplies of excess commodities, enhance wildlife habitats, and increase recreational opportunities. As of 1994, there were 36.4 million acres enrolled in the CRP.

On December 14, 1994, the Secretary of Agriculture announced a decision to extend and target CRP contracts. The first contracts of about 2 million acres were scheduled to expire October 1, 1995, with about 22 million expiring in 1996 and 1997. During calendar year 1995, USDA will consider requests from CRP participants to be released early from their CRP contracts, to extend contracts for an additional 10 years, or to modify their current contracts to reduce the amount of acreage subject to it but with a 10-year extension. USDA will also consider bids from producers to enroll new acreage in the CRP program subject to new 10-year contracts. Producers whose contracts were to expire in 1995 but who opted to extend them another year, based on the Secretary's August 24, 1994, announcement, will be offered a 9-year extension. This authority applies to 10-year contracts entered into prior to enactment of the 1990 FACT Act on November 28, 1990. CRP participants who entered into contracts after that date can extend those contracts for 5 years.

Producers with CRP contracts receive annual rental payments for idling their acreage over a 10- to 15-year period. Rental payments will be re-evaluated before extending a CRP contract. Depending upon rental rates for comparable land, some producers will be offered higher rental payments and others less.

The new acreage will have to meet higher environmental and conservation criteria to be accepted and provide significant soil erosion, water quality, or wildlife benefits. The Department will also establish criteria to ensure that acreage released from current CRP contracts in 1995 can be properly managed for conservation purposes.

Export Enhancement Program

The Export Enhancement Program was initiated in May 1985 under the Commodity Credit Corporation (CCC) Charter Act and later formally authorized by the 1985 FSA and extended by the 1990 FACT Act (*14*). A main objective of the program is to help U.S. exporters compete against unfair trade practices used by other countries by using export bonuses to make U.S. agricultural commodities competitive in world markets. The 1990 Act provides that the CCC must make available a minimum of $500 million in CCC commodities or cash each fiscal year to carry out the EEP.

EEP expenditures for fiscal 1994 were $1.15 billion, a historic high, but Congress capped EEP spending at $800 million for fiscal 1995 (*1*). The major commodity sold with EEP bonuses is wheat, which averaged 82 percent of subsidy expenditures from 1989 through 1993 (*34*). Wheat EEP expenditures averaged $785 million for fiscal 1991-93 (*34*). EEP sales accounted for 60 percent of wheat exports during fiscal 1993. Exporters receive cash bonuses, but prior to November 1991 they received generic certificates.

Ad Hoc Disaster Assistance and Crop Insurance

Ad hoc disaster assistance has been passed to cover crop yield losses in every year since 1988 (*21*). Virtually all crops have been covered, including field crops, fruits, vegetables, ornamental crops, and spices. If producers received ad hoc disaster assistance in a given year, they were required to buy crop insurance in the following year. There have been two levels of yield loss necessary to qualify for an ad hoc payment: (1) for producers with crop insurance, losses needed to be greater than 35 percent of expected production, and (2) for producers without crop insurance, losses needed to be greater than 40 percent of expected production. Producers have not been able to collect both deficiency payments and disaster payments on the same bushels.

Payments have been calculated by determining the eligible amount of loss and multiplying it by the applicable payment rate. For program crops, the payment rate has been 65 percent of the target price for producers participating in the commodity programs, and 65 percent of the loan rate for nonparticipating producers. The amount was factored to meet the limits of the appropriation at 50.04 percent for crop year losses in 1990-92. Losses in other years (1988, 1989, 1993, and 1994) were not pro-rated.

Producers who received ad hoc disaster payments were required to purchase Federal Crop Insurance Corporation (FCIC) multiple peril crop insurance on the following year. Failure to pay the crop insurance premium meant forfeiture of disaster payments.

Federal response to yield losses for 1995 crops will change from prior years. The Federal Crop Insurance Reform Act of 1994 was passed in October 1994 (*28*). Current legal authorities for ad hoc crop disaster relief were repealed. A new revised crop insurance program will replace ad hoc disaster bills as the Federal response to emergencies involving wide-

spread crop loss. The Act repeals the authority to designate ad hoc disaster programs for crops as "emergency" spending under "pay-go" budget rules, making future programs "on-budget" as opposed to "off-budget."

The new Federal crop insurance program is supplemented with a new catastrophic coverage level (CAT) available to farmers for a nominal processing fee of $50 per crop, with a cap of $200 per farmer per county and $600 per farmer in total. The catastrophic coverage level under crop insurance reform provides 50 percent yield protection at 60 percent of the price election. Farmers may purchase additional insurance coverage providing higher yield or price protection levels. To ensure wide participation, producers must purchase crop insurance coverage at the CAT level or above if they participate in the Federal commodity support programs, obtain certain Consolidated Farm Service Agency loans, or have a new or extended Conservation Reserve Program contract. "Old" CRP contracts that have not been renegotiated are not affected by the linkage requirement.

The Act also creates the "Noninsured Assistance Program" (NAP), a standing aid program for crops not currently covered by crop insurance. This program provides coverage similar to the 50/60 protection offered by CAT, but is triggered by a 35-percent area loss. Once this area loss threshold is met, farmers will be paid for their crop losses in excess of 50 percent at 60 percent of the expected market price.

Effects of the 1990 FACT Act

Wheat programs under the 1990 FACT Act have had a major impact on both producers and taxpayers. Direct payments to producers in crop years 1991-94 averaged $2.4 billion, about 24 percent of gross returns, compared with $2.9 billion or 31 percent during 1986-90. Program costs for wheat have declined with strengthening market prices. EEP expenditures for wheat exports averaged $794 millon for fiscal 1992-93 (*34*). Participation rates for the program remain high, averaging 86 percent for crop years 1991-94, up from 84 percent for 1986-90. The 1990 FACT Act has had a minor impact on consumers.

Producers

Direct payments made to producers under the wheat program during crop years 1991-94 were similar to the mid- to late 1980's, but much higher than the early 1980's. Direct payments consisting of deficiency, FOR storage, disaster, and CRP averaged $2.4 billion during 1991-94, compared with $2.9 billion during 1986-90 (table 14). Under the 1990 FACT Act, direct payments ranged from $2.9 billion in 1991 to an estimated $1.9 billion in 1994. Deficiency payments comprise the greatest share of direct payments. During crop years 1991-94, direct payments ranged from 27 percent to 48 percent of market value of production, compared with 19 percent to 77 percent between 1986 and 1990 (table 12). While direct payments were a significant percentage of market value of production for many of the years between 1981 and 1994, they accounted for an even greater share of

Table 14—Direct payments to wheat farmers, 1986-94 crops

Item	1986	1987	1988	1989	1990	1991	1992	1993	1994
					Billion dollars				
Deficiency payments	3.46	3.29	1.23	0.57	2.42	2.25	1.37	1.93	1.13
Diversion payments	0.22	--	--	--	--	--	--	--	--
Reserve storage payments	0.17	0.11	0.05	0.01	--	0.02	0.11	0.05	--
Disaster payments	--	--	0.47	0.47	0.04	0.07	0.12	0.22	0.28
Conservation Reserve Program payments	0.05	0.33	0.42	0.45	0.49	0.52	0.52	0.52	0.52
Total direct payments	3.90	3.73	2.17	1.50	2.95	2.86	2.12	2.72	1.93
Market value of production	5.06	5.42	6.74	7.58	7.14	5.95	7.97	7.83	8.00
Total income	8.96	9.15	8.91	9.08	10.09	8.81	10.09	10.55	9.93

-- = No payments.

Sources: (*19* and *26*).

returns above cash expenses between 1981 and 1994 (table 12).

After accounting for costs and benefits, wheat program participation raised average annual real net returns per acre by 105 percent for 1991-94 and by 217 percent for 1986-90, compared with real net returns without direct payments (table 15). In addition, direct payments contribute to a lower variation in average annual net returns, as variation in returns for 1981-94 was lowered by about 30 percentage points (table 15).

Returns per acre for wheat are higher for participants in Federal farm programs than for nonparticipants. Returns during 1991-94, for example, averaged 33 percent greater for participants (table 16). However, during 1988 nonparticipants realized a greater return helped mostly by the higher prices caused by the 1988 drought and avoiding the acreage-idling requirements of a 27.5-percent ARP.

Because of the attractive financial gains, participation rates averaged about 86 percent during 1991-94, slightly above the 84 percent average for 1986-90 (table 16). Program participation is based on expected returns, while results presented in table 16 are realized net returns. This explains why a 10-percent loss to participants in 1988 was accompanied by an 88-percent participation rate but a 73-percent gain in 1990 had a lower participation rate of 83 percent. Participation rates rose slightly in 1993 and 1994 due, in part, to the 0-percent ARP requirement.

Participating base is spread mostly in the Great Plains followed by North Central and Northwest regions (table 17). Based on the 1992 wheat crop acreage base, the Great Plains accounted for 49 percent of all partici-

Table 15—Real net returns for wheat, with and without direct government payments, 1981-94 crop years

Crop year	Real net returns, 1987$[1]			
	Without direct payments		With direct payments	
	$/bu	*$/planted acre*	*$/bu*	*$/planted acre*[2]
1981	1.07	33.69	1.43	44.98
1982	0.82	26.41	1.12	35.88
1983	1.52	48.10	1.94	61.43
1984	0.70	22.83	1.32	43.30
1985	0.74	23.90	1.67	53.49
1986	0.10	3.01	1.91	55.38
1987	0.39	12.45	2.01	64.30
1988	1.18	32.69	2.16	59.74
1989	0.81	21.59	1.38	36.70
1990	0.34	11.90	1.21	42.81
1991	0.38	8.06	1.36	38.65
1992	0.88	29.95	1.51	51.49
1993	0.82	27.16	1.66	55.21
1994	0.86	29.13	1.47	48.37
Average 1981-94	0.75	23.63	1.58	49.41
Coefficient of variation 1981-94	0.50	0.50	0.20	0.19

[1]*Calculated from data in table 12 and appendix table 1. Total net returns without direct payments equal the market value of production less total (fixed and variable) cash expenses for planted acres. Total net returns with direct payments equal total income less total cash expenses. All data are deflated by the GDP implicit price deflator (1987 = 100).* [2]Per acre returns reflect total income less total cash expenses for the sum of planted, conservation, and CRP acres. Planted acre cash expenses equal planted acres times total cash expenses (fixed and variable) per acre. Conservation cash expenses per acre equal conservation acres (ARP, PLD, PIK, and 0-85/92) times variable cash expenses per acre times 0.25. CRP cash expenses per acre equal to CRP acres times variable cash expenses per acre times 0.25.

Table 16—Wheat returns above variable cash costs to program nonparticipants and participants, including participation rates[1]

Year	Nominal net returns to:		Real net returns to:		Gain to participants	Participation rate
	Nonparticipants	Participants	Nonparticipants	Participants		
	Dollars per acre				*Percent*	
1981	72.02	77.21	91.27	97.86	7	--[2]
1982	66.45	68.19	79.29	81.37	3	48
1983	81.52	84.19	93.49	96.55	3	78
1984	76.52	81.45	84.09	89.51	6	60
1985	64.40	77.16	68.22	81.74	20	73
1986	37.58	78.27	38.78	80.77	108	85
1987	51.22	80.02	51.22	80.02	56	88
1988	82.61	74.17	79.51	71.39	-10	86
1989	68.63	70.15	63.26	64.65	2	78
1990	50.46	87.44	44.53	77.18	73	83
1991	50.57	73.53	43.00	62.53	45	85
1992	74.39	92.30	61.53	76.34	24	83
1993	70.91	101.07	57.45	81.84	42	88
1994	77.71	92.43	61.52	73.18	19	87

[1]Net returns to nonparticipants equal market returns per acre less variable cash expenses. Net returns to participants equal the sum of government returns and market returns per acre less variable expenses (planted, conservation, and CRP). Government returns per acre equal the sum of deficiency payment returns (the non-ARP fraction of the acre times deficiency payment rate times program yield) plus diversion payment returns (the diverted fraction of the acre times diversion payment rate times program yield). Planted acre expenses equal the fraction of the acre planted times variable expenses per acre. Idled acre (ARP and PLD) expenses equal the fraction of the acre idled times variable expenses times 0.25. Flex acres are assumed to be planted to wheat. Only the required ARP and PLD for program participation are taken into account. [2]All producers were eligible for program benefits.

pating wheat acreage base with a participation rate of 90 percent. The North Central region claimed 6 percent of the participating base with a participation rate of 64 percent. The Northwest had 5 percent of the participating base with an 87-percent participation rate.

The Great Plains, North Central, and Northwest regions received 91 percent of total deficiency payments made for the 1992 crop. As expected, the Great Plains received the largest share (68 percent).

In November 1991, wheat EEP bonuses began to be issued in cash. Cash bonuses coupled with lower CCC wheat inventories have a price-enhancing effect. A summary of studies on EEP indicates that EEP is estimated to have increased wheat exports and raised prices to producers by 0.4 to 12 percent (*34*).

Taxpayers

Under the 1990 FACT Act, direct payments averaged $2.4 billion for crop years 1991-94, a 17-percent decline from the 1985 Act's (crop years 1986-90) average cost of $2.9 billion (table 14). Total program costs for wheat—net price support and related expenditures—have also trended down. For example, net price support and related expenditures for fiscal 1986 were $3.3 billion but dropped to $1.7 billion for fiscal 1994 (app. table 4).

Taxpayers are affected by disaster payments and expenditures for EEP. The new crop insurance program could lower payments on disaster-related events, as current legal authorities for ad hoc crop disaster relief are repealed. EEP bonuses on wheat export sales averaged $759 million in fiscal 1992-93, compared with an average $532 million in fiscal 1987-91. EEP expenditures on wheat are expected to decline, as EEP expenditures for all commodities during fiscal 1994

Table 17—Distribution of wheat acreage base and deficiency payments by region, 1992 crop year

Region	Base	Participation base	Participation rate	Deficiency payments	Share of payments
	Million acres		*Percent*	*Billion dollars*	*Percent*
Great Plains[1]	54.90	49.30	89.8	0.930	67.8
North Central[2]	10.00	6.40	64.0	0.161	11.7
South[3]	6.17	3.66	59.4	0.075	5.5
Northwest[4]	5.41	4.72	87.1	0.163	11.9
Southwest[5]	1.91	1.34	70.4	0.036	2.7
Northeast[6]	0.48	0.23	47.6	0.005	0.4
Total	78.87	65.65	83.2	1.370	100.0

[1]CO, KS, MT, NE, ND, OK, SD, TX, and WY. [2]IL, IN, IA, MI, MN, MO, OH, and WI. [3]AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, and WV. [4]AK, ID, OR, and WA. [6]CT, DE, ME, MD, MA, NJ, NY, PA, and VT.

Source: (*19*).

were $1.15 billion, a historic high, but Congress capped EEP spending at $800 million for fiscal 1995. While EEP can rise from $800 million in fiscal 1996 even with GATT limitations, total expenditures will fall significantly by 2000 because of GATT limitations.

Consumers

In recent years, the wheat program has used direct payments to support farmers' income, thereby placing most of the program costs on taxpayers rather than consumers of wheat. The U.S. wheat farm program has had little effect on retail prices of wheat products partly because of wide marketing margins. The amount of wheat used to produce a loaf of bread costs about 6 percent of the retail price (*4*). However, distribution can account for 40 percent of the retail price. Large farm price swings in wheat have small effects on retail prices of bread, pasta, and other bakery products.

The effect of the U.S. wheat program on individual consumers has also been small because the quantity of wheat consumed per capita, although rising, is relatively low. Consumers used 138 pounds of flour per capita in 1992, up from 136 pounds in 1985 and 111 pounds in 1970. The 138 pounds used in 1992 is the equivalent of 3.2 bushels of wheat.[7] The 1992 farm value of this wheat was $10.37.[8]

While the EEP may have raised the producer price of wheat, especially since November 1991 when EEP bonuses were switched from in-kind to cash, effects to the individual consumer are less pronounced. For example, if the EEP were to increase producer prices by 0.4 to 12 percent and this increase were passed on to consumers, this program could increase consumers' annual per capita costs by $0.04 to $1.24[9] or annual total costs by $10 million to $320 million (*4*).[10]

During the years under the 1990 FACT Act (crop years 1991-94), loan rates rose each year, from $2.04 per bushel in 1991/92 to $2.58 per bushel in 1994/95, a 26-percent rise. Livestock production costs appear to be unaffected by the increase in loan rates, because the price of wheat has generally remained above the loan rate. The wheat price is also free to fall below the loan rate under the marketing loan provisions for crop years 1993 and 1994.

[7]100/73 pounds of wheat per 1 lb. of flour x 138 pounds of flour = 189 pounds of wheat. 189 pounds of wheat / 60 pounds of wheat per bushel = 3.2 bushels of wheat.

[8]$3.24 per bushel x 3.2 bushels of wheat = $10.37.

[9]Annual farm value of wheat consumed per capita for 1992 = $10.37. $10.37 x 0.004 = $0.04 and $10.37 x 0.12 = $1.24.

[10]$0.04 to $1.24 per capita x 258.2 million population = $10 million to $320 million.

Supply

The decreased role of the United States as a world wheat stockholder has increased the likelihood of shortrun year-to-year variations in wheat supply. However, such a situation did not develop in 1991-94. Also, with the introduction of flex acres such a situation would usually last no longer than 1 year because of the ability to flex acres into wheat.

Indirect

Wheat programs have had some indirect effects on land values, resource use, and other crop and livestock production. Program benefits are capitalized into land values, especially those associated with a base or allotment. Consequently, production costs are higher and net returns are lower than if program benefits had not been capitalized.

Environmental quality is also affected by wheat production, but less so than for more input-intensive crops. Runoff from cropland contains pesticides and fertilizers that affect water quality. Limiting use of these inputs tends to increase production costs or restrict yields. Because of concerns about environmental quality, the conservation reserve and conservation compliance was continued with the 1990 FACT Act and a Water Quality Incentive Program and Integrated Farm Management Program were started. Additional environmentally friendly programs continue to be proposed by the public, such as an environmental reserve program.

Wheat programs also affect other agricultural sectors. Limited substitution can occur between grains, especially for livestock feed. Programs that tend to raise wheat prices may also lead to cost increases for livestock and poultry producers.

Problems and Issues To Be Addressed in 1995

Structure and Performance Issues

Levels of imports and carryover stocks are two important issues likely to be discussed in the 1995 farm bill debate.

U.S. Wheat Imports

The U.S.-Canada Free Trade Agreement went into effect on January 1, 1989, to reduce barriers and promote trade between the two countries. However, trade disputes for agriculture have continued. Wheat imports have been a prominent dispute. Is the recent surge in Canadian wheat imports an aberration or an expected norm? The equitable settlement of this dispute could remove potential impediments to trade.

Stocks

Are current U.S. stock levels of wheat optimal? With existing programs it could take a minimum of 1 year to respond to a world shortfall in wheat production. Some industry groups think that ideal wheat stocks should be above recent levels. However, larger stocks imply lower producer prices and larger government payments in a period when the public is calling for reduced budget expenditures. Other industry groups would like to see continued low carryover stock levels thereby maintaining low stocks-to-use ratios and higher producer prices. Another issue is the mix of government/public stock holding.

Impact of Trade Agreements on Sector

Congress has passed the North American Free Trade Agreement (NAFTA) and the GATT agreement. Multilateral and regional trade agreements reduce global or regional trade barriers. Proponents of these agreements stress their long-run positive effects on economic growth and employment; opponents cite sectoral adjustment costs and shortrun job losses. There is disagreement among those who favor trade agreements on whether regional preferential arrangements are building blocks or stumbling blocks to further liberalizing global trade. Trading rules in these agreements will affect U.S. agricultural interests and influence farm income.

GATT Agreement

The Uruguay Round agreement will change world wheat markets fundamentally as subsidized exports, particularly from the European Union, are reduced substantially (*31*, pp. 11-12). The reduction in exporter subsidies will increase importers' prices, dramatically for some countries, and constrain world trade in the first years of the agreement. Increased global incomes will increase world import demand significantly after 2000. While the United States might have been expected to gain market share as a result of GATT, U.S. exports are forecast to grow at a slower rate than world trade because of the amount of wheat land remaining in the CRP. Despite growing world demand and reduced competition from the EU, wheat base enrolled in the CRP is expected to prevent the United States from producing enough wheat to meet demand growth. Current projections are that the U.S. share of world trade in 2000 will about equal the 1990-94 average of 32 percent, but will begin to decline after 2000, falling to 31 percent by 2005. U.S.

prices are projected to rise significantly, increasing market returns and farm incomes and decreasing deficiency payments.

NAFTA

NAFTA is forecast to increase incomes and reduce wheat production in Mexico, thereby increasing U.S. wheat exports to Mexico (*30*, p. 6). NAFTA is expected to have small aggregate benefits for the U.S. wheat industry.

Policy Options and Alternatives for Sector

Conservation Reserve Program

USDA, in December 1994, announced that it planned to extend the CRP program for another 10 years. Many favor a strong CRP and want to promote conservation in the 1995 farm bill. If the CRP is not continued, larger annual set-asides might be necessary.

Some groups would like to see the CRP financed from noncommodity program funds. They argue that since the CRP benefits all of society, its funds should not be charged to the agriculture budget. Other groups want the CRP to have more of an environmental reserve emphasis focusing on sensitive areas and increased emphasis on water quality and tree planting. Others would like financial assistance for farmers in meeting soil and water regulations.

Revenue Insurance

Can a revenue insurance program be designed that would replace deficiency payments? Revenue assurance plans could guarantee farmers revenue from the market and government payments would be at least a certain minimum. Such a change would require more time to implement and probably require a pilot program.

Marketing Loan Provisions

Should marketing loan provisions be continued for wheat? Marketing loans for wheat and feed grains were implemented beginning with the 1993/94 crop year. Implementation had been mandated under the 1990 Omnibus Budget Reconciliation Act in the case that a new international trade accord under GATT was not concluded by June 1992. Because posted county prices of the various classes of wheat have rarely dipped below county loan rates in this period, marketing loan provisions for wheat have had minimal effect. However, if prices move dramatically lower, the marketing loan provision would allow prices to drop to market clearing levels while providing important income support, but with additional budget outlays.

Government Expenditures

Federal budgetary outlays for commodity income and price support programs are expected to be an issue in the 1995 farm bill debate. This will bring farm program spending under continuing scrutiny as Congress and the executive branch look for ways to reduce the budget deficit. Deficiency payments account for a large share of commodity program spending. Expenditure levels for the Export Enhancement Program may also receive review.

A number of options to reduce outlays for deficiency payments are being examined. The economic implications for agriculture may differ for each option. Deficiency payments could be reduced by a legislated reduction in target prices or by raising ARP levels and price supports to the higher end of their allowed ranges (*5*). Acreage eligible for deficiency payments could also be reduced legislatively by increasing the percentage of normal flex acres. Higher ARP's raise market prices through cuts in production and reduce acres eligible for deficiency payments (*6*). Higher loan rates lower deficiency payment rates when U.S. market prices are at or near loan rate levels. However, raising loan rates above world prices would make U.S. commodities less competitive, may increase CCC net loan outlays, increase costs for export promotion programs, and could lead to costly stock building in the United States. Reducing deficiency payments either by cutting target prices or by increasing the normal flex acreage percentage has fewer economic side effects than the other options discussed.

Funding for the Export Enhancement Program could be reduced or terminated. While total EEP expenditures can rise from $800 million in fiscal 1996 even with GATT limitations, total expenditures will fall significantly by 2000 because of GATT limitations. If further reductions or elimination of EEP were made, export levels would decline in the short run.

Export Competitiveness

A stated aim of the Clinton Administration is to promote U.S. trade competitiveness in a more open international trading environment. The issue for U.S. agriculture is how the sector can increase its longrun competitiveness in world markets and contribute to real growth of the national economy without incurring excessive adjustment costs. Several farm groups are suggesting aggressive use of export enhancement programs to the extent allowed under GATT and use of funds that otherwise would have been used for export

enhancement for other export promotion programs and foreign market development and export expansion. In contrast, some industry groups are advocating the elimination of the Export Enhancement Program.

Targeting Benefits

Some farm groups have discussed targeting benefits to sustain the family farm and reduce government costs. Targeting would involve limiting the volume of production for which any one person can receive deficiency payments and commodity loans. There would also be prohibitions on the artificial subdivision of a farm to avoid such limits. Initial units of production from a family farm would be protected from budget cuts. A paid land diversion would be implemented to offset any loss of large farm participation in the set-aside program.

Total Flexibility

Another option that might be considered is the extension of flexibility introduced in the 1990 FACT Act. Allow 100 percent flex on current bases and farmers would be able to switch back and forth freely between commodities. Deficiency payments could be paid based on previous farm bases. Some commodities may experience an increase in production, thereby increasing their supply and lowering prices.

Continuation of Present Policy

The FACT Act of 1990 provides the legislative authority through the 1995 marketing year for commodity programs and the Omnibus Budget Reconciliation Act of 1993 extends some program provisions through 1997. Results of the first 5 years of USDA's baseline provide an analysis of what might occur to the sector if we continued with our present policy until the year 2000 (USDA, ERS Baseline).

High wheat prices and relatively strong demand in 1994/95 are expected to result in increased wheat plantings in 1995, leading to increased production and lower U.S. and world prices. The European Union exports remain high in 1995 and 1996 because GATT constraints are not very binding until later years. Australia's exports rebound in the second half of 1995/96 from the 1994 drought. Because wheat prices rebound in later years, ARP's are kept at zero. After 1999 wheat prices rise relative to coarse grains and oilseeds and flex acres gradually shift back to wheat.

CRP contract extensions are offered and some additional wheat base enters the CRP in 1996/97, as additional sign-ups boost CRP acres to target levels. From 1998/99 through 1999/2000 wheat base enrolled in the CRP drops from 10.5 million acres to 8.7 million as some producers decide not to extend CRP contracts. The large amount of wheat base remaining in the CRP limits U.S. ability to respond to increasing wheat prices with increased plantings. There is a small increase in acres idled in the 0-85/92 program as base acres leave the CRP.

Domestic use grows during 1995-2000. Increases of 15 million bushels per year in food use imply increasing per capita food use of wheat, but at a slowing rate. Feed and residual use decline gradually after 1998 as wheat prices rise compared with other feeds.

U.S. exports are flat in 1995 and 1996 as competitor supplies rebound from 1994/95. U.S. exports increase in 1997/98, and the increase accelerates in 1998/99 as reduced competition from the EU opens market opportunities. However, the United States also reduces export subsidies and the volume of subsidized exports, slowing total export growth in 1999/2000.

Growth in demand outgains yield growth by the end of the decade and higher prices encourage additional land to enter production. Net returns to participants remain the same, about $90 per acre, as returns from rising market prices are offset by declining deficiency payments. Participation rates remain about the same at 86 percent. Net returns to nonparticipants rise from $67 to $73 per acre between 1995/96 and 1999/2000.

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Appendix table 1—Acreage, yield, and production for wheat

Year	Planted	Harvested	Idled[1]	Yield	Production
	Million acres			*Bushels/acre*	*Million bushels*
1965	57.4	49.6	7.2	26.5	1,316
1966	54.1	49.6	8.3	26.3	1,305
1967	67.3	58.4	---	25.8	1,508
1968	61.9	54.8	---	28.4	1,557
1969	53.5	47.1	11.1	30.6	1,443
1970	48.7	43.6	15.7	31.0	1,352
1971	53.8	47.7	13.5	33.9	1,619
1972	54.9	47.3	20.1	32.7	1,546
1973	59.3	54.1	7.4	31.6	1,711
1974	71.0	65.4	---	27.3	1,782
1975	74.9	69.5	---	30.6	2,127
1976	80.4	70.9	---	30.3	2,149
1977	75.4	66.7	---	30.7	2,046
1978	66.0	56.5	9.6	31.4	1,776
1979	71.4	62.5	8.2	34.2	2,134
1980	80.8	71.1	---	33.5	2,381
1981	88.3	80.6	---	34.5	2,785
1982	86.2	77.9	5.8	35.5	2,765
1983	76.4	61.4	29.8	39.4	2,420
1984	79.2	66.9	18.3	38.8	2,595
1985	75.6	64.7	18.8	37.5	2,424
1986	72.1	60.7	21.0	34.4	2,091
1987	65.8	56.0	23.9	37.7	2,108
1988	65.5	53.2	22.5	34.1	1,812
1989	76.6	62.2	9.6	32.7	2,037
1990	77.2	69.3	7.5	39.5	2,736
1991	69.9	57.7	15.9	34.3	1,981
1992	72.3	62.4	7.3	39.4	2,459
1993	72.2	62.7	5.7	38.3	2,403
1994[2]	70.5	61.7	4.7	37.6	2,320

--- = Not applicable.

[1]Acreage idled under wheat programs only: ARP, diversion, PLD, 50/92, 0/92, 0/85. Does not include acres retired under the CRP (0.6 acres in 1986; 4.2 million acres in 1987; 7.1 million acres in 1988; 8.8 million acres in 1989; 10.3 million acres in 1990; 10.4 million acres in 1991; 10.6 million acres in 1992; 10.8 million acres in 1993; and 10.8 million acres in 1994).

[2]Projected as of November 9, 1994.

Source: (*26*).

Appendix table 2--Use and ending stocks for wheat

Crop year	Food	Feed[1]	Exports[2]	Total use[3]	Ending stocks[4]	Stocks-to-use
	Million bushels					*Percent*
1965/66	518	146	852	1,577	661	41.9
1966/67	505	101	771	1,454	513	35.3
1967/68	518	37	765	1,391	630	45.3
1968/69	522	157	544	1,284	904	70.4
1969/70	520	188	603	1,367	983	71.9
1970/71	517	193	741	1,513	823	54.4
1971/72	524	262	610	1,459	983	67.4
1972/73	532	200	1,135	1,934	597	30.9
1973/74	544	125	1,217	1,970	340	17.3
1974/75	545	35	1,019	1,690	435	25.7
1975/76	589	37	1,173	1,899	666	35.1
1976/77	588	74	950	1,704	1,113	65.3
1977/78	587	193	1,124	1,983	1,178	59.4
1978/79	592	158	1,194	2,031	924	45.5
1979/80	596	86	1,375	2,158	902	41.8
1980/81	611	59	1,514	2,296	989	43.1
1981/82	602	135	1,771	2,618	1,159	44.3
1982/83	616	195	1,509	2,417	1,515	62.7
1983/84	643	371	1,426	2,540	1,399	55.1
1984/85	651	407	1,421	2,578	1,425	55.3
1985/86	674	284	909	1,961	1,905	97.1
1986/87	696	401	999	2,196	1,821	82.9
1987/88	721	290	1,588	2,684	1,261	47.0
1988/89	726	151	1,415	2,394	702	29.3
1989/90	749	140	1,232	2,225	537	24.1
1990/91	786	496	1,069	2,443	866	35.4
1991/92	789	250	1,280	2,417	472	19.5
1992/93	834	186	1,354	2,472	529	21.4
1993/94	869	278	1,228	2,470	570	23.1
1994/95[5]	885	225	1,250	2,457	518	21.1

[1]Approximates feed and residual use and includes negligible quantities used for alcoholic beverages.
[2]Exports include flour and other products expressed in wheat equivalent.
[3]Totals may not add because of rounding.
[4]Includes government-owned and privately-owned stocks.
[5]Projected 11/9/94.
Source: (*26*).

Appendix table 3—Prices and ending stocks for wheat

Crop year	Ending stocks CCC	FOR[1]	Free	Total[2]	Price received	Loan rate	Target price	Direct payment
	Million bushels				Dollars/bushel			
1965/66	299	---	361	660	1.35	1.25	---	0.75[3]
1966/67	122	---	391	513	1.63	1.25	---	1.32
1967/68	100	---	530	630	1.39	1.25	---	1.36
1968/69	140	---	765	904	1.24	1.25	---	1.38
1969/70	277	---	705	983	1.25	1.25	---	1.52
1970/71	353	---	470	823	1.33	1.25	---	1.57
1971/72	355	---	628	983	1.34	1.25	---	1.63
1972/73	6	---	591	597	1.76	1.25	---	1.34
1973/74	1	---	340	340	3.95	1.25	---	0.68
1974/75	---	---	435	435	4.09	1.37	2.05	---
1975/76	---	---	666	666	3.56	1.37	2.05	---
1976/77	---	---	1,113	1,113	2.73	2.25	2.29	---
1977/78	48	342	788	1,178	2.33	2.25	2.90	0.65
1978/79	50	393	481	924	2.97	2.35	3.40	0.52
1979/80	188	260	454	902	3.80	2.50	3.40	---
1980/81	200	360	429	989	3.99	3.00	3.63[4]	---
1981/82	190[5]	562	407	1,159	3.69	3.20	3.81	0.15[6]
1982/83	192[5]	1,061	262	1,515	3.45	3.55	4.05	0.50
1983/84	188[5]	611	600	1,399	3.51	3.65	4.30	0.65
1984/85	378[5]	654[7]	393	1,425	3.39	3.30	4.38	1.00
1985/86	602[5]	433[7]	870	1,905	3.08	3.30	4.38	1.08
1986/87	830[5]	463[7]	528	1,821	2.42	2.40	4.38	1.98
1987/88	283[5]	467	511	1,261	2.57	2.28	4.38	1.81
1988/89	190[5]	287	139	616	3.74	2.21	4.23	0.69
1989/90	117[5]	144	275	536	4.00	2.06	4.10	0.10
1990/91	163[5]	14	689	866	2.61	1.95	4.00	1.28
1991/92	152[5]	50	270	472	3.00	2.04	4.00	1.35
1992/93	150[5]	28	351	529	3.24	2.21	4.00	0.81
1993/94	150[5]	6	414	570	3.26	2.45	4.00	1.03
1994/95[8]	145	0	373	518	3.45	2.58	4.00	0.85

--- = Not applicable.
[1]Farmer-Owned Reserve.
[2]Totals may not add because of rounding.
[3]Value of domestic marketing certificate, 1964/65-1973/74.
[4]Growers who planted in excess of their normal crop acreage were eligible for a target price of $3.08 per bushel.
[5]Includes 147 million bushels in the Food Security Reserve.
[6]Deficiency payment, 1981/82 to date.
[7]Includes special producer storage loan program.
[8]Projected as of November 9, 1994.
Source: (*26*).

Appendix table 4--Program costs for wheat, fiscal years 1975-94[1]

Fiscal year	Deficiency payment	Acreage diversion[2]	Disaster	Exports[3]	Reseal loan or producer storage[4]	Loan operations		Other[5]	Net price support and related expenditures[6]
						Outlays	Repayments		
					Million dollars				
1975	0.0	0.2	101.3	0.0	0.0	42.7	48.7	-70.0	25.5
1976	0.0	0.0	52.8	0.0	0.0	64.8	44.9	-2.5	70.2
1976TQ[7]	0.0	0.0	71.3	0.0	0.0	64.8	10.6	-1.8	123.7
1977	0.0	0.0	136.9	0.0	0.4	1,940.0	181.1	2.7	1,898.9
1978	996.4	5.5	116.8	0.0	109.3	827.0	1,231.4	16.7	840.3
1979	617.6	9.7	95.6	0.0	66.5	367.9	867.3	10.2	300.2
1980	0.0	0.0	96.8	0.0	18.0	587.3	565.2	729.0	865.9
1981	0.0	0.0	320.6	0.0	110.5	1,594.5	559.4	70.3	1,536.5
1982	414.5	0.0	79.2	0.0	230.2	2,033.5	556.0	28.6	2,230.0
1983	820.8	140.8	5.9	0.0	200.9	2,583.3	402.9	61.2	3,410.0
1984	423.9	656.6	0.6	0.0	176.9	1,605.3	424.1	82.9	2,522.1
1985	1,739.5	651.6	0.0	0.0	167.6	2,277.8	216.7	25.8	4,645.6
1986	1,674.0	14.8	0.0	0.0	172.3	1,570.3	294.7	253.8	3,390.5
1987	1,547.3	-0.5	0.0	0.0	171.9	1,170.4	406.9	326.5	2,808.7
1988	757.9	0.0	0.3	0.0	113.0	670.8	839.3	-56.6	646.0
1989	619.3	0.0	0.3	0.0	47.1	187.4	622.5	-213.3	18.2
1990	722.9	0.0	0.0	0.0	24.8	504.3	259.8	-231.6	760.6
1991	2,722.1	0.0	0.0	0.0	2.6	576.1	495.2	-30.8	2,774.8
1992	1,785.1	0.0	0.0	0.0	14.0	359.3	496.4	-8.1	1,653.9
1993	1,826.3	0.0	0.0	0.0	8.6	625.1	533.4	241.6	2,168.2
1994	1,692.2	0.0	0.0	0.0	2.5	633.6	642.8	31.7	1,717.2

[1]Excludes P.L. 480 program and wheat product costs. Payments or receipts less than $50,000 are recorded as "0.0."
[2]Includes acreage diversion in 1970-71, diversion in 1978-93, and additional set-aside in 1975.
[3]Commodity export payments.
[4]Reseal storage payments ended in 1975. Producer storage payments in 1977-94.
[5]Net outlays include: storage, handling, transportation, processing and packaging costs, purchases, and other items. Receipts include cash sales proceeds and other items. Negatives indicate net receipts.
[6]Direct price support or deficiency, diversion, disaster, certificate, export, and producer storage payments plus government expenditures for storage and handling, transportation, processing and packaging, loan collateral settlements, loans, purchases, and other expenses less sales proceeds, cash loan repayments, certificates sold, and other receipts. Totals may not add because of rounding.
[7]Includes July/September 1976 to allow for shift from July/June to October/September fiscal year.
Source: (*20*).

Appendix table 5--Value comparisons for wheat

Year	Loan value per acre		Market value per acre		Gross value of production	
	Nominal[1]	Real[2]	Nominal[3]	Real[2]	Nominal[4]	Real[2]
	----------Dollars----------				---Billion dollars---	
1960	46.46	178.68	45.41	174.67	2.36	9.07
1961	42.78	162.67	43.74	166.30	2.26	8.57
1962	50.00	185.87	51.00	189.59	2.23	8.28
1963	45.86	168.62	46.62	171.40	2.12	7.80
1964	33.54	121.08	35.35	127.60	1.76	6.35
1965	33.13	116.64	35.78	125.97	1.78	6.25
1966	32.88	111.82	42.87	145.81	2.13	7.23
1967	32.25	106.44	35.86	118.36	2.10	6.92
1968	35.50	111.64	35.22	110.74	1.93	6.07
1969	38.25	114.52	38.25	114.52	1.80	5.40
1970	38.75	110.09	41.23	117.13	1.80	5.11
1971	42.38	114.22	45.43	122.44	2.17	5.85
1972	40.88	105.35	57.55	148.33	2.72	7.01
1973	39.50	95.64	124.82	302.23	6.76	16.36
1974	37.40	83.30	111.66	248.68	7.29	16.23
1975	41.92	85.21	108.94	221.41	7.57	15.39
1976	68.18	130.35	82.72	158.16	5.87	11.22
1977	69.08	123.57	71.53	127.96	4.77	8.53
1978	73.79	122.37	93.57	155.18	5.29	8.77
1979	85.50	130.53	129.96	198.41	8.11	12.38
1980	100.50	140.17	133.67	186.42	9.50	13.25
1981	110.40	139.92	127.30	161.35	10.28	13.03
1982	126.02	150.39	122.48	146.15	9.54	11.38
1983	143.81	164.92	138.29	158.59	8.49	9.74
1984	128.04	140.70	131.53	144.54	8.80	9.67
1985	123.75	131.09	115.50	122.35	7.47	7.91
1986	82.56	85.20	83.25	85.91	5.06	5.22
1987	85.96	85.96	96.89	96.89	5.42	5.42
1988	75.36	72.53	126.85	122.09	6.74	6.49
1989	67.36	62.08	121.64	112.11	7.58	6.98
1990	77.02	67.98	103.10	90.99	7.14	6.30
1991	69.97	59.50	102.90	87.50	5.94	5.05
1992	87.07	72.02	127.66	105.59	7.97	6.59
1993	93.84	75.98	124.86	101.10	7.83	6.34
1994[5]	97.01	76.81	129.72	102.71	8.00	6.34

[1]Loan rate times yield per harvested acre. Loan rate includes allowance for unredeemed loans and purchases by the Government valued at the average loan and purchase rate, by State.

[2]Nominal dollars deflated by the GDP implicit price deflator (1987 = 100).

[3]Season average price received by farmers times yield per harvested acre. Season average farm price received by farmers is obtained by weighting State prices by quantities sold.

[4]U.S. production times season average price received by farmers.

[5]Projected as of November 9, 1994.

Source: (*26*).

Appendix table 6–World production, consumption, and ending stocks for wheat, 1965-94 crop years

Crop year	Production[1]	Consumption[1]	Ending stocks[2]	Ending stocks to consumption
	Million metric tons			*Percent*
1965/66	259.3	277.1	60.7	21.9
1966/67	300.7	273.8	87.6	32.0
1967/68	291.9	281.9	97.7	34.6
1968/69	323.8	300.1	121.3	40.4
1969/70	304.0	321.8	103.5	32.2
1970/71	306.5	329.5	80.5	24.4
1971/72	344.1	335.4	89.2	26.6
1972/73	337.5	351.8	74.9	21.3
1973/74	366.1	358.3	82.7	23.1
1974/75	355.2	356.6	81.4	22.8
1975/76	352.7	347.3	86.7	25.0
1976/77	414.4	373.8	127.3	34.1
1977/78	377.9	396.0	109.2	27.6
1978/79	439.0	413.3	134.8	32.6
1979/80	418.4	432.0	121.2	28.0
1980/81	436.2	444.0	113.9	25.6
1981/82	445.1	445.2	113.7	25.5
1982/83	472.8	455.6	131.1	28.8
1983/84	484.4	468.8	146.6	31.3
1984/85	509.0	489.4	166.2	34.0
1985/86	494.9	490.4	170.6	34.8
1986/87	524.1	515.7	179.1	34.7
1987/88	496.0	525.3	149.8	28.5
1988/89	495.0	524.3	120.5	23.0
1989/90	533.2	532.2	121.5	22.8
1990/91	588.2	563.5	146.2	25.9
1991/92	542.6	558.5	130.3	23.3
1992/93	561.4	543.6	148.1	27.2
1993/94	558.8	564.3	142.5	25.3
1994/95[3]	526.5	552.0	117.0	21.2

[1]Production and consumption data are based on an aggregate of differing local marketing years. For countries for which stocks are not available (excluding the USSR), consumption estimates represent apparent utilization.

[2]Ending stocks data are based on an aggregate of differing local marketing years and should not be construed as representing world stock levels at a fixed point in time. Stock data are not available for all countries and exclude parts of Eastern Europe and parts of Asia. Stock levels have been adjusted for estimated year-to-year changes in USSR grain stocks, but do not purport to include the entire level of USSR stocks.

[3]Projected as of November 9, 1994.

Source: (*29*).

Appendix table 7–Wheat production, trade, and stocks, world and United States, 1970-94

Year	Production			Exports			Ending stocks		
	World[1]	United States	U.S. share	World[2]	United States[2]	U.S. share	World[3]	United States	U.S. share
	Million bushels		*Percent*	*Million bushels*		*Percent*	*Million bushels*		*Percent*
1970	11,263	1,352	12	2,021	732	36	2,959	823	28
1971	12,644	1,619	13	1,911	621	33	3,279	985	30
1972	12,400	1,546	12	2,561	1,167	46	2,753	597	22
1973	13,451	1,711	13	2,315	1,148	50	3,040	340	11
1974	13,052	1,782	14	2,363	1,039	44	2,989	435	15
1975	12,958	2,127	16	2,451	1,164	47	3,187	666	21
1976	15,225	2,149	14	2,326	958	41	4,678	1,113	24
1977	13,884	2,046	15	2,675	1,159	43	4,013	1,178	29
1978	16,129	1,776	11	2,646	1,187	45	4,955	924	19
1979	15,372	2,134	14	3,160	1,367	43	4,452	902	20
1980	16,029	2,381	15	3,458	1,541	45	4,183	989	24
1981	16,353	2,785	17	3,722	1,792	48	4,176	1,159	28
1982	17,372	2,765	16	3,634	1,468	40	4,816	1,515	31
1983	17,797	2,420	14	3,814	1,428	37	5,386	1,399	26
1984	18,701	2,595	14	3,902	1,400	36	6,105	1,425	23
1985	18,183	2,424	13	3,112	919	30	6,269	1,905	30
1986	19,259	2,091	11	3,333	1,044	31	6,581	1,821	28
1987	18,224	2,108	12	4,119	1,596	39	5,503	1,261	23
1988	18,189	1,812	10	3,759	1,381	37	4,429	702	16
1989	19,591	2,037	10	3,759	1,232	33	4,464	536	12
1990	21,612	2,736	13	3,718	1,041	28	5,372	866	16
1991	19,937	1,981	10	4,016	1,290	32	4,788	472	10
1992	20,627	2,459	12	4,134	1,365	33	5,442	529	10
1993	20,532	2,403	12	3,656	1,216	33	5,225	571	11
1994	19,346	2,320	12	3,513	1,249	36	4,299	518	12

[1]World production data aggregated from different countries which have different marketing years.
[2]World export data based on a July/June year and excludes intra-EC trade. U.S. export data based on a July/June trade year.
[3]Stocks data are based on an aggregate of differing local marketing years and should not be construed as representing world stock levels at a fixed point in time.
[4]Projected as of November 9, 1994.
Source: (*29*).