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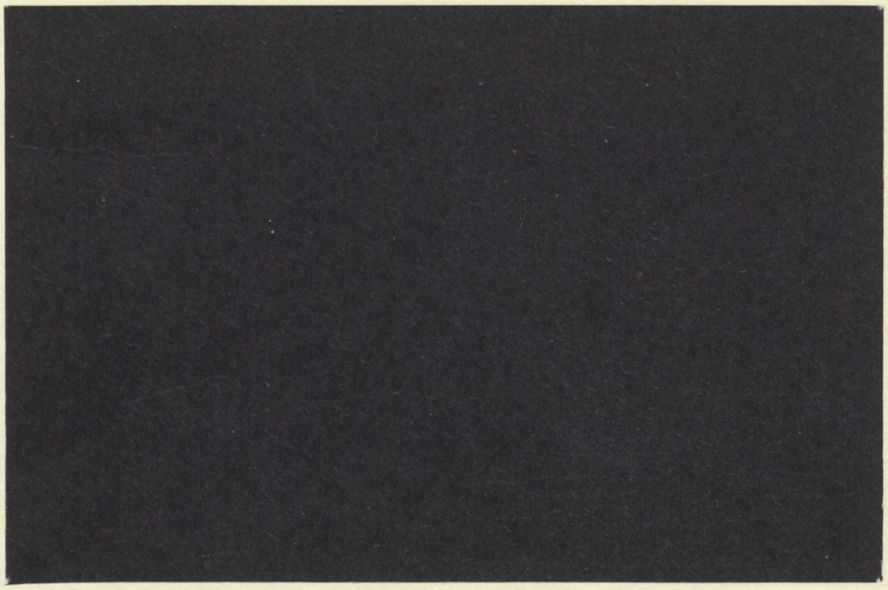

ASSESSING THE EFFECTS OF THE 1988 DROUGHT ON U.S. AGRICULTURE UNDER ALTERNATIVE STOCK SCENARIOS

FAPRI Staff Report #7-90
July 1990

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EXECUTIVE SUMMARY

While the drought of 1988 greatly reduced crop yields, consumers felt very little effect in terms of higher food prices. Corn production was reduced to half of the previous year's amount. However, the accumulation of over four billion bushels of corn served to buffer the effects of low crop production and prevent a substantial rise in feed grain prices which would have adversely affected the livestock sector. This analysis examines the importance of carry-in stocks by investigating what would have occurred to the agricultural sector had the U.S. entered the 1988 drought year with about two billion bushels of corn stocks or levels traditionally associated with stock policy objectives using the modeling system maintained by the Food and Agricultural Policy Research Institute (FAPRI). The report analyzes how meat and food prices and taxpayer spending on agriculture might have changed under sharply lower stock levels. The analysis was conducted over the historical period 1985 through 1990, plus projections through 1996.

Program Assumptions

A baseline scenario reflecting actual corn carry-in stocks (1988/89) of over 4 billion bushels was compared to an alternative scenario with only 2.3 billion bushels. In order to reach the lower 1988 stock levels, it was necessary to modify the program operation, beginning with reduced loan rates in 1985. The "reduced stock" scenario was generated under the assumption of similar weather patterns experienced prior to and after the drought. Exceptionally good crops harvested in 1985, 1986, and 1987 required program modifications for the reduced stock scenario:

- Wheat, feed grain, and soybean loan rates were lowered significantly in 1985/86. Baseline levels were used thereafter.
- A 20 percent acreage reduction program (ARP) and a 15 percent paid land diversion (PLD) were used in 1985/86 - 1987/88 for feed grains. Baseline ARPs and PLDs were used thereafter.
- Entry into the Farmer-owned Reserve (FOR) was not allowed. Producers were provided incentives to repay old FOR loans.
- CCC inventories for feed grains were reduced to zero in 1987 and beyond. A minimum 150 million bushel food security reserve was retained for wheat.

Results for Reduced Stock Scenario

- Crop prices fell significantly in 1985/86 due to lower loan rates. Ending corn stocks fell to 2.3 billion bushels by 1987/88 (4.3 billion under the baseline).
- Corn prices rose to $3.59 per bushel ($2.54 in the baseline) in 1988/89 in response to combined effects of the drought and lower stocks.

- Partial liquidation of the beef herd occurred in 1989 and 1990 due to higher feed costs. Swine and poultry slaughter also fell initially before increasing in 1991 in response to higher livestock prices. Biological lags in beef production prevented rapid response to higher prices.

- Meat prices rose 8.5 percent above the baseline in 1991 and averaged 2.7 percent higher for the 1989-1996 period. Food prices rose almost 3 percent higher in 1991 and averaged .9 percent higher over the 1989-1996 period.

- Consumer food expenditures peaked at almost $15 billion higher than the baseline in 1991 and averaged almost $5 billion higher annually from 1989-1996. Lower income families suffered disproportionately from higher food costs relative to higher income families.

- Government savings of $15 billion associated with the reduced stock scenario relative to the baseline over the 1986-1990 period is projected to cost consumers almost $40 billion more in food expenditures over the period 1989-96.

- "Surplus capacity" and "burdensome" stock levels were commonly perceived to be key problems facing U.S. agriculture in the spring of 1988, after three consecutive years of high yields and weak demand for U.S. feed grains. Even though the large stockpiles were generally seen as a problem by policymakers, farmers and taxpayers, the analysis indicates that these high stock levels did play an important role in buffering the effects of the drought of 1988 on consumers.

ASSESSING THE EFFECTS OF THE 1988 DROUGHT ON U.S. AGRICULTURE UNDER ALTERNATIVE STOCK SCENARIOS

Introduction

During the decade of the 1980s, U.S. agriculture has endured the effects of three rather significant droughts. A measure of the magnitude of these droughts is reflected by comparing the per acre corn yields in 1980, 1983, and 1988 of 91, 81, and 85, respectively, with the average yield of 114 bushels from 1979-1989 (with the three drought years removed). Following the 1980 drought, the 1980/81 average farm price per bushel of corn in the U.S. was $3.12. The 1983/84 corn price was $3.21. However, following the 1988 drought, the corn price in 1988/89 averaged only $2.54 per bushel, 67 cents per bushel below the 1983/84 price.

A major reason for the substantially lower drought price of corn in 1988/89 was the large carry-in of corn and other feed grain stocks. In 1980/81 and 1983/84, carry-in corn stocks were 2.03 and 3.52 billion bushels, respectively. In the fall of 1988, corn stocks were estimated at 4.26 billion bushels.

As a result of the buffered drought price of corn in 1988/89, liquidation in the livestock industry was relatively minor and food price increases were small. These circumstances were more fortuitous than planned. In order to get a better understanding of the magnitudes of these and other effects of the drought of 1988, the Food and Agricultural Policy Research Institute (FAPRI) analyzed the effects the drought of 1988 would have had on the U.S. agricultural sector, consumers, and taxpayers under a scenario which carried in substantially lower crop stock levels prior to the drought. Since over half of the actual carry-in stocks were government-owned or controlled, the analysis was conducted by moving these stock levels to zero in the year preceding the drought. Using quantitative models maintained by FAPRI to simulate the U.S. agricultural sector, the effects of the 1988 drought on U.S. crop and livestock production and prices, food prices, consumption, expenditures, government costs, and net farm income are quantified and compared under two scenarios.

The first scenario is based on historical information through 1989 and projections through 1996 under the policies of the Food Security Act of 1985 (FSA85). The March 1990 baseline of FAPRI extends FSA85 through 1996 by holding target prices frozen at 1990 levels and using current formulas to determine crop loan rates and dairy support prices (FAPRI #1-90).

The second scenario simulates a lower stock carry-in in 1988/89. This scenario analyzes what would have occurred to the agricultural sector had taxpayers been unwilling to accumulate and store government-controlled stocks. Lower loan rates, higher acreage reduction programs (ARPs) and paid land diversions (PLDs) and denial of entry into the Farmer-owned Reserve (FOR) are needed to reduce stocks prior to the drought.

Program Assumptions

The baseline for this analysis uses historical data over the period 1985/86 through 1989/90 and projections from the March 1990 FAPRI analysis for the period 1990/91 - 1995/96. Crop policy instruments for feed grains and wheat are given in Table 1 for 1985/86 through 1990/91 for the baseline and reduced stock scenarios. Thereafter, these policy assumptions are similar (and reported in FAPRI #1-90).

For the reduced stock scenario, rather drastic modifications to program instruments were necessary to cause carry-in stock levels to fall substantially below the 4.3 billion bushels observed in 1988/89. Wheat, feed grain, and soybean loan rates were lowered sharply in 1985/86. Thereafter, loan rates for these commodities were set at the baseline levels (Table 1). The ARP rate for feed grains was raised significantly over the baseline in 1985/86 and 1986/87. The PLD rate was increased from zero under the baseline to 15 percent under the reduced stock scenario in 1985/86 and maintained at that level for the two years thereafter. The 20 percent limit on feed grain ARP rates was assumed to remain in effect so higher PLD rates were used to achieve supply reduction objectives.

Entry into the FOR and extension of loans was denied under the reduced stock scenario beginning in 1985/86. FOR and CCC inventories were reduced to zero under this scenario by 1987/88, a 1.96 billion bushel reduction from the observed baseline levels. Total ending stocks were 2.33 billion bushels in 1987/88 under the reduced stock scenario, 1.93 billion bushels less than the baseline.

The particular program assumptions used to achieve lower stocks prior to the drought have associated with them a stream of costs and benefits. These assumptions seem reasonable given the way the farm program has been managed in recent years. Alternative methods could have been used to accomplish lower stock levels which would have possibly had a different stream of costs and benefits. This analysis was not designed to judge the effectiveness of program management of FSA85 nor to advocate a particular stock policy. The intent here was to assess the short and long term effects of alternative stock balances on the U.S. agricultural sector.

Results

The analysis was conducted over the period 1985/86 through 1995/96. For the baseline, actual observed data are reported through 1988/89 and projections thereafter from the FAPRI March 1990 baseline. Figures are used to summarize important differences in the two scenarios. Detailed tables are also provided in the appendix.

Crop Effects

Figure 1 illustrates the actual (bold line) and simulated (dotted line) ending stock paths for corn under the two scenarios prior to 1989/90. Favorable weather plus moderate set aside

Table 1. Policy Assumptions Used in the Reduced-stock Scenario*

	85/86	86/87	87/88	88/89	89/90	90/91
FEED GRAINS:			-- Percent --			
ARP Rate						
Baseline	10.00	17.50	20.00	20.00	10.00	10.00
Reduced-stock	20.00	20.00	20.00	20.00	10.00	10.00
PLD Rate						
Baseline	0.00	2.50	15.00	10.00	0.00	0.00
Reduced-stock	15.00	15.00	15.00	10.00	0.00	0.00
			-- Dollars Per Bushel --			
Loan Rate**						
Baseline	2.55	1.92	1.82	1.77	1.65	1.57
Reduced-stock	2.02	1.92	1.82	1.77	1.65	1.57
WHEAT:			-- Percent --			
ARP Rate						
Baseline	20.00	22.50	27.50	27.50	10.00	5.00
Reduced-stock	20.00	22.50	27.50	27.50	10.00	5.00
PLD Rate						
Baseline	10.00	7.50	0.00	0.00	0.00	0.00
Reduced-stock	10.00	7.50	0.00	0.00	0.00	0.00
			-- Dollars Per Bushel --			
Loan Rate						
Baseline	3.30	2.40	2.28	2.21	2.06	1.95
Reduced-stock	2.52	2.40	2.28	2.21	2.06	1.95

*Policy assumptions under the Reduced-stock scenario beyond 1990/91 are the same as those under the baseline.

**Corn.

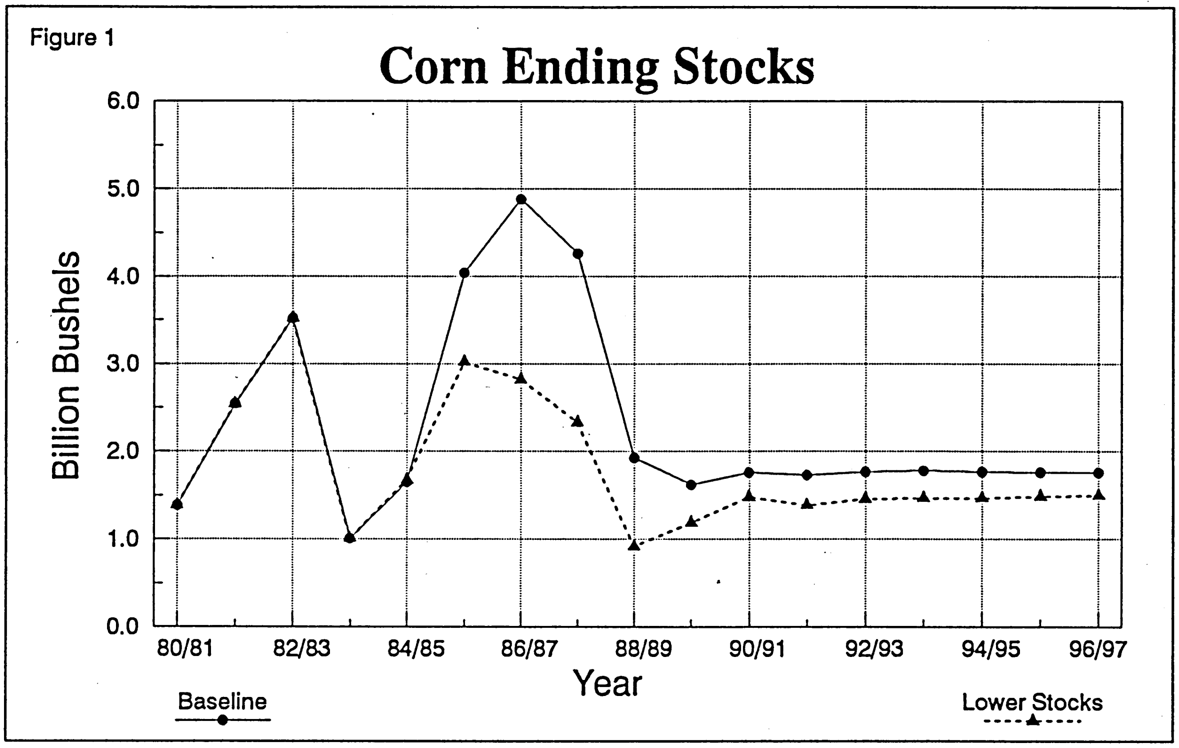


Figure 1
Corn Ending Stocks
Billion Bushels
6.0
5.0
4.0
3.0
2.0
1.0
0.0
80/81
82/83
84/85
86/87
88/89
90/91
92/93
94/95
96/97
Year
Baseline
Lower Stocks

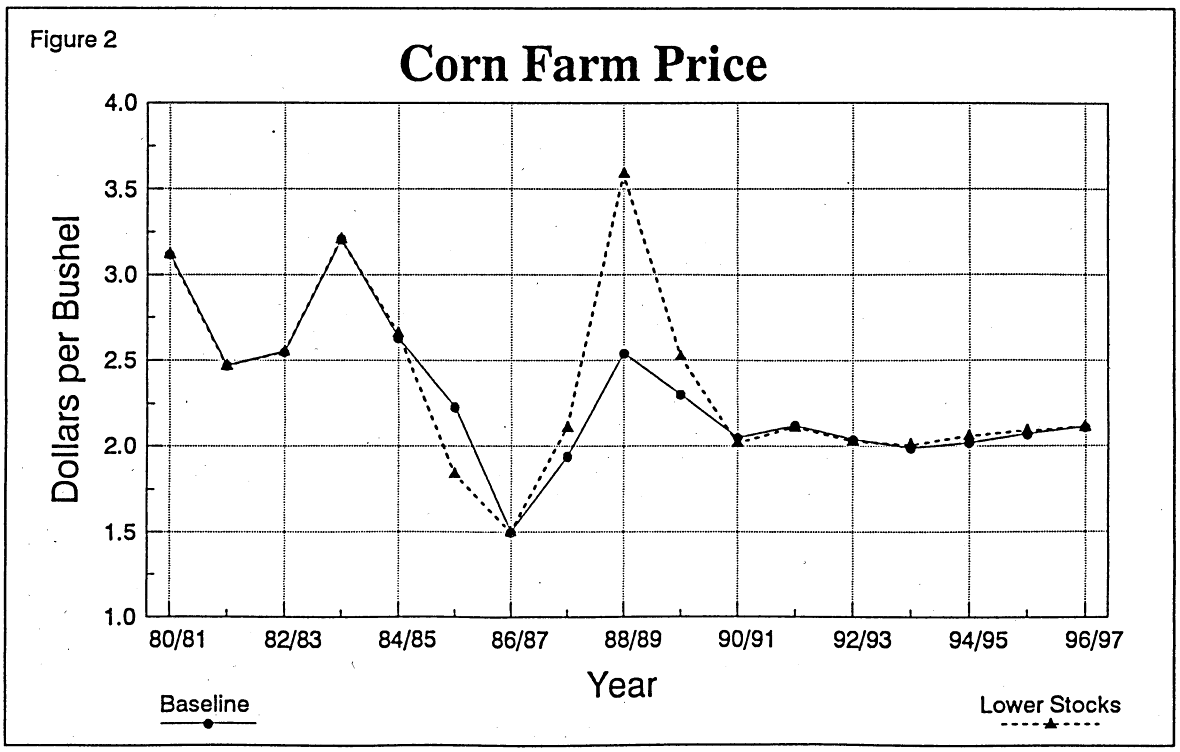


Figure 2
Corn Farm Price
Dollars per Bushel
4.0
3.5
3.0
2.5
2.0
1.5
1.0
80/81
82/83
84/85
86/87
88/89
90/91
92/93
94/95
96/97
Year
Baseline
Lower Stocks

programs in 1985, 1986, and 1987 resulted in large production. Actual ending stocks peaked at almost 5 billion bushels in 1986/87 and remained high at 4.3 billion bushels in 1987/88 (i.e., preceding the corn harvest of 1988). Ending stocks fell almost 2.3 billion bushels to 1.9 billion bushels one year later due to a combination of the drought and use of commodity certificates.

Under the reduced stock scenario, lower loan rates and higher diversion programs reduced production relative to the baseline in 1985/86 and 1986/87. This, combined with reduced accumulation of government stocks, resulted in an ending stock figure in 1987/88 of 2.3 billion bushels.

The price effect of these alternative stock paths is illustrated in Figure 2. Sharply lower loan rates under the reduced stock scenario in 1985/86 result in a corn farm price drop of 39 cents per bushel from the baseline to $1.84. This lower corn price, combined with higher set-aside requirements in 1986/87, lowered corn production by almost one billion bushels in 1986/87 from the baseline. The fall in production combined with a significant drop in government-controlled stocks under this scenario left the farm price of corn unchanged from the baseline at $1.50. The corn price under this scenario rises 18 cents above the baseline in 1987/88 as FOR and CCC stocks are reduced to zero. In 1988/89, however, the corn farm price rose more than $1.00 above the baseline to $3.60 per bushel due to sharply reduced production, much lower carry-in stock levels, and strong market demand. Within two years of the drought, increased production and reduced feed utilization resulted in similar price paths for the two scenarios.

The price effects on the other feed grains, wheat, and soybeans from the reduced stock scenario are in the same direction as corn price effects but of a smaller magnitude. This was largely due to cross substitution from the corn sector and moderate differences in ending stocks of these commodities under the two scenarios beginning in 1985/86. For example, wheat prices for 1988/89 under the baseline and reduced stock scenarios were $3.72 and $4.49, respectively, a difference of 77 cents per bushel. Carry-in wheat stocks for 1988/89 were 887 million bushels under the reduced stocks scenario compared with 1,261 million bushels under the baseline. Most of the reduction was due to no entry into the FOR and more loan repayments.

Because of lower carry-in stocks and higher prices under the reduced stock scenario, corn exports fell in 1988/89 and 1989/90 relative to the baseline. Thereafter, export paths were similar.

Returns to corn producers are lower than the baseline in 1985/86 and 1986/87 crop years under the reduced stock scenario but higher in crop years 1988/89 and 1989/90 for program participants and non-participants. In the other years, the differences are relatively minor. The other feed grain crops follow similar patterns. Wheat returns are a little higher under the reduced stock scenario in crop years 1988/89 and 1989/90 but are about the same across both scenarios in all other years. Soybean returns under the reduced stock scenario are lower than the baseline in 1987/88 but higher in 1988/89 through 1990/91 before falling below the baseline again in 1991/92. Thereafter soybean returns are similar for both scenarios.

Livestock Effects

Production

The more than one dollar per bushel higher corn price under the reduced stock scenario in the drought crop year caused a large liquidation in the beef herd, which was sustained for two years. As a result, beef production was sharply higher in 1989 and 1990 relative to the baseline (Figure 3). Thereafter, the reduced breeding herd led to much lower production from 1991 through 1996. Only in the last year of this period were the annual production totals within 250 million pounds of each other.

Pork production also responded to higher 1988/89 crop prices with an immediate and sharp sell-off of the breeding herd (Figure 4). This rapid response caused pork production to be 9.5 percent lower in 1990 and 7.6 percent lower in 1991 as far fewer barrows and gilts are sold relative to the baseline. Thereafter, in response to higher farm prices, production under the reduced stock scenario rose sharply in 1992, about equaling production under the baseline. Production in 1993 surpassed the baseline by more than one half billion pounds, or 3.5 percent. Over the period 1989 through 1996, the pork production path under the reduced stock scenario showed substantially greater variation than did the baseline path.

Broiler production was not affected as much as beef and pork by higher crop prices. Broilers' greater efficiency in converting grain to meat gives them a comparative advantage under a period of higher prices. Production declined 3.4 percent in 1989 and 1.2 percent in 1990 relative to the baseline. Thereafter, it was a little higher than the baseline in response to higher meat prices.

Farm Prices

Omaha 900-1100 pound steer prices (Figure 5) were lower under the reduced stock scenario in 1987 and 1988 as a result of slightly higher beef production. However, when herd liquidation began in 1989, cattle prices dropped almost 6.5 percent below the baseline. Prices began to recover in 1990 rising to almost the baseline level. Over the next four years, 1991-1994, farm cattle prices averaged almost 12 percent higher than the baseline because of lower herd size and reduced production. Prices remained higher thereafter due to the long biological response time required to rebuild the herd. Kansas City feeder steer prices were also higher than the baseline and generally followed the same pattern as the fed cattle prices (Appendix Table A.6).

Barrow and gilt prices were slightly higher than the baseline in 1989 due to lower production but saw a sharp rise in 1990 to more than $60 per cwt or 32 percent above the baseline (Figure 6) as production fell to only 90 percent of the baseline level. Partly in response to higher cattle prices and relatively low pork production, hog prices remained more than $14 per cwt above the baseline in 1991. Thereafter price differences between the two scenarios were less than $3.50 per cwt in any year. Over the post-drought period, hog prices averaged more

Figure 3

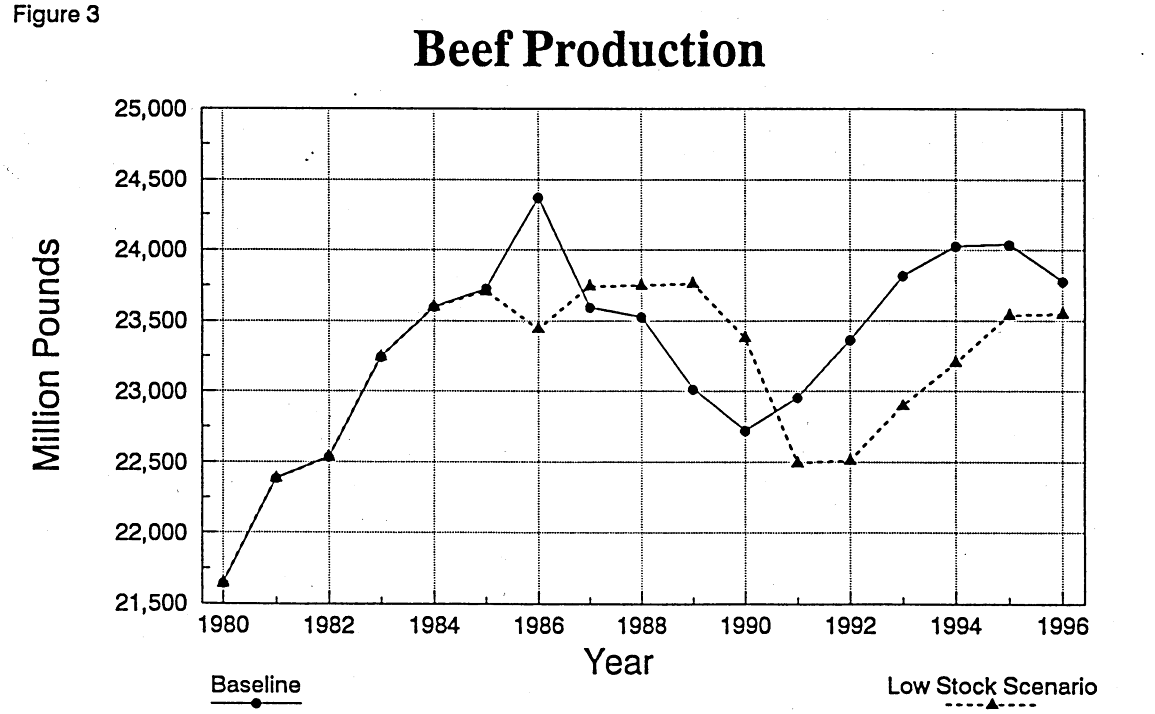
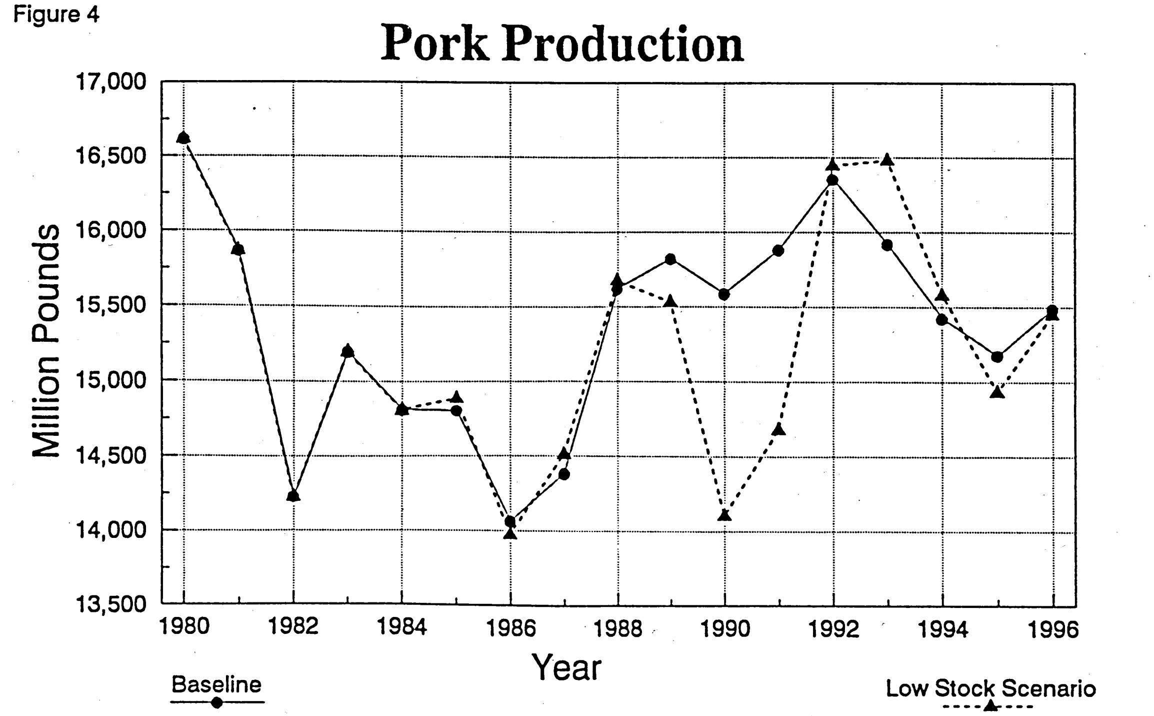


Figure 4



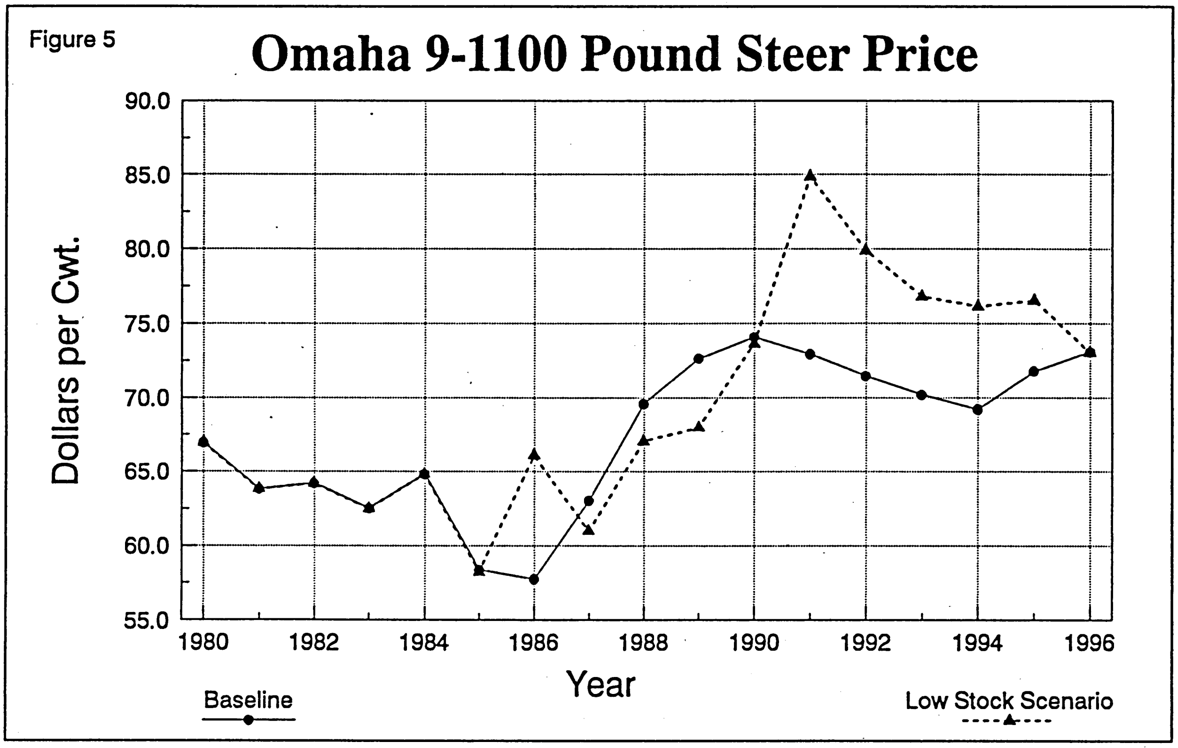


Figure 5
Omaha 9-1100 Pound Steer Price
90.0
85.0
80.0
75.0
70.0
65.0
60.0
55.0
Dollars per Cwt.
1980
1982
1984
1986
1988
1990
1992
1994
1996
Year
Baseline
Low Stock Scenario

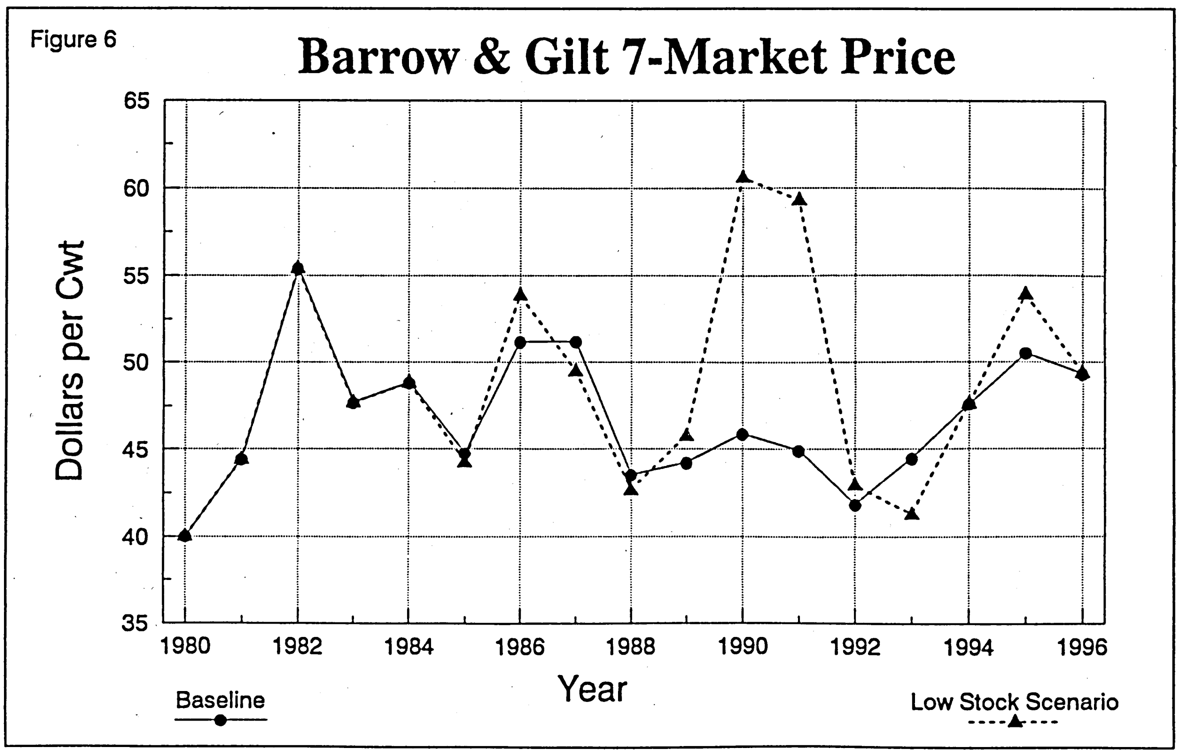


Figure 6
Barrow & Gilt 7-Market Price
65
60
55
50
45
40
35
Dollars per Cwt
1980
1982
1984
1986
1988
1990
1992
1994
1996
Year
Baseline
Low Stock Scenario

than $4.00 per cwt above the baseline. The drought combined with reduced stocks resulted in much larger variations in the production and price paths relative to those of the baseline.

Broiler prices were 15 percent above the baseline in 1991, peaking at almost 66 cents per pound (Appendix Table A.6). Over the three year 1989-1991 period, 12 city wholesale broiler prices averaged 10.7 percent above the baseline. Thereafter, broiler prices dropped in response to higher (than baseline) production.

Returns to Producers

As expected, returns to feedlot operators and cow-calf producers dropped in 1989 relative to the baseline reflecting the sharply higher feed costs. Reduced stock scenario returns in 1990 were also lower than the baseline. Thereafter, returns to the cattle industry were higher than the baseline due to significantly higher cattle prices (except for 1996 in a cow-calf operation). Over the period 1989-1996, losses to cow-calf operators in 1989 and 1990 were more than offset by higher returns thereafter, averaging almost $3.00 per head higher over the period relative to the baseline. Returns to feedlot operators were more than $8.50 per head higher. Producers in general faced more unstable crop prices which resulted in greater year-to-year variability of livestock returns under the lower stock scenario.

Hog returns and their relative variance were higher under the reduced stock scenario over the 1989-1996 period, averaging $9.10 per head (farrow-to-finish) compared to less than $4.00 per head under the baseline (Appendix Table A.7). Returns under the reduced stock scenario were less stable, however. A similar pattern of higher returns but greater variation was observed for broiler returns under the reduced stock scenario. If the higher risk associated with less stability in livestock returns over time under a reduced stock scenario causes producers to change their production plans, then important ramifications are quite likely for all markets in the vertical food chain.

Retail Meat Prices

Following the drought, consumers benefitted briefly with relatively lower beef prices under the reduced stock scenario (Figure 7). Higher feed prices caused a greater liquidation of beef resulting in greater meat availability. The retail beef price was more than 3 percent below the baseline in 1989 (Appendix Table A.8). This difference would have been greater had not pork and broiler prices supported the beef price. However, by 1991 the retail beef price rose to more than 11 percent above the baseline. Retail beef prices remained above the baseline through 1995 and averaged 10 cents per pound (3.74 percent) more under the reduced stock scenario over the eight year post-drought period.

Retail pork prices averaged almost 5 percent higher over the 1989-1996 period than the baseline and peaked at 17 percent higher in 1991 (Figure 8). Retail broiler prices averaged almost two percent higher over the 1989-1996 period.

Figure 7

Beef Retail Price

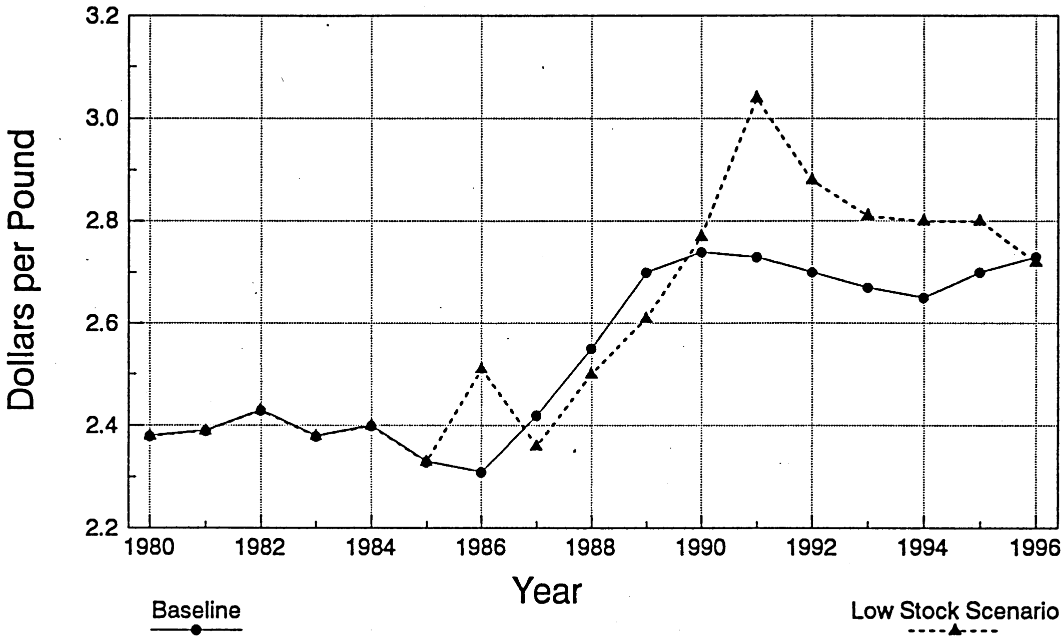
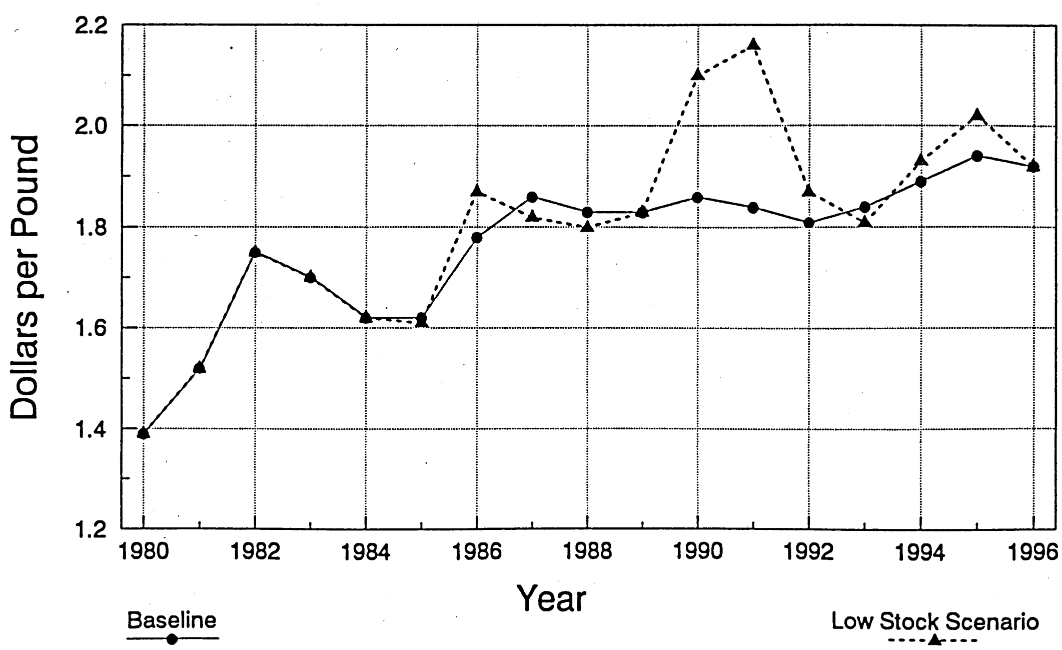


Figure 8

Pork Retail Price



The Consumer Price Index (CPI) for meat was 8.5 percent higher than the baseline in 1991 and averaged 2.67 percent more over the eight year period (Appendix Table A.8). The CPI for food showed more modest increases under the reduced drought scenario, 2.8 percent higher in 1991 and .9 percent higher on average over the 1989-1996 period.

With higher U.S. meat prices over the period following the drought, there would be some incentive for exports of meat products from other countries to increase or for exports of U.S. meat products (particularly chicken) to other countries to decline. This analysis treated meat imports and exports as exogenous and held the figures the same under both scenarios. In reality, the response in international markets is likely to be small.

Consumer Expenditures

Consumer expenditures on meat were much greater under the reduced stock scenario. While per capita meat expenditures were about $2.00 below than the baseline in 1989 due to lower beef prices (Figure 9), expenditures rose sharply in 1990 and 1991 (Appendix Table A.9). Consumers would have spent over $35.00 per person more on meat in 1991 under the reduced stock scenario. This increased spending would have occurred through 1995 reflecting higher beef and pork prices. The impact of lower stocks on consumers would have lingered well beyond the drought year.

Total U.S. food expenditures were about $515 billion under both scenarios in 1989 (Appendix Table A.9). Thereafter, higher prices largely associated with reduced meat supplies drove expenditures about $7.2 billion higher in 1990 under the reduced stock scenario (Figure 10). The scenario differences in food expenditures peaked at almost $15 billion in 1991. Over the post-drought 1989-1996 period, consumers would have averaged paying almost $5 billion more per year ($39.12 billion cumulative) under the reduced stock scenario.

Farm Receipts and Income

As crude measures of producer well-being, crop and livestock receipts and net cash and farm incomes are compared across scenarios (Appendix Table A.10). In general, net farm income under the reduced stock scenario averaged higher than the baseline as income from crop producers (before 1988) and consumers (after 1988) was transferred to livestock producers. Baseline receipts for crops over the 1989-1996 period averaged $83.04 billion per year. Under the reduced stock scenario, receipts rose to $83.93 billion or about one percent higher. Livestock receipts under the baseline and reduced stock scenarios were $82.57 and $84.98 billion, respectively, or 2.9 percent more under the reduced stock scenario. However, this increase in receipts was largely negated by higher production expenses associated with higher feed costs.

Net cash income averaged $1.59 billion more per year under the reduced stock scenario. Net farm income averaged $1.67 billion more per year. Year-to-year changes in net farm

Figure 9

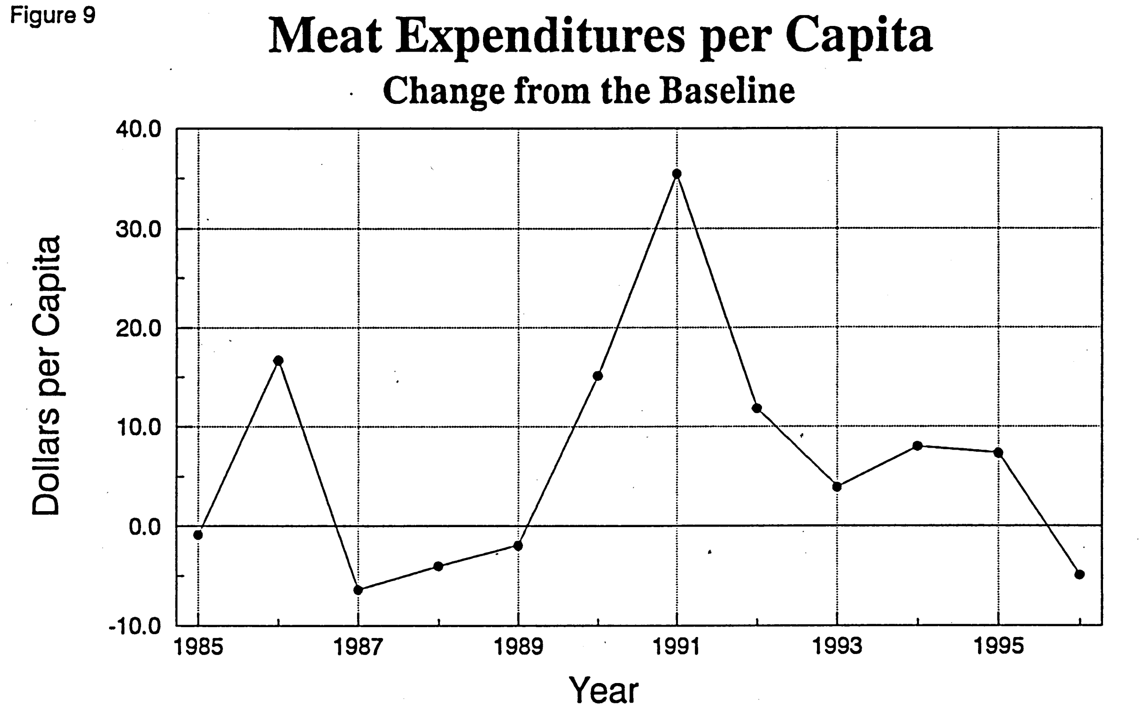
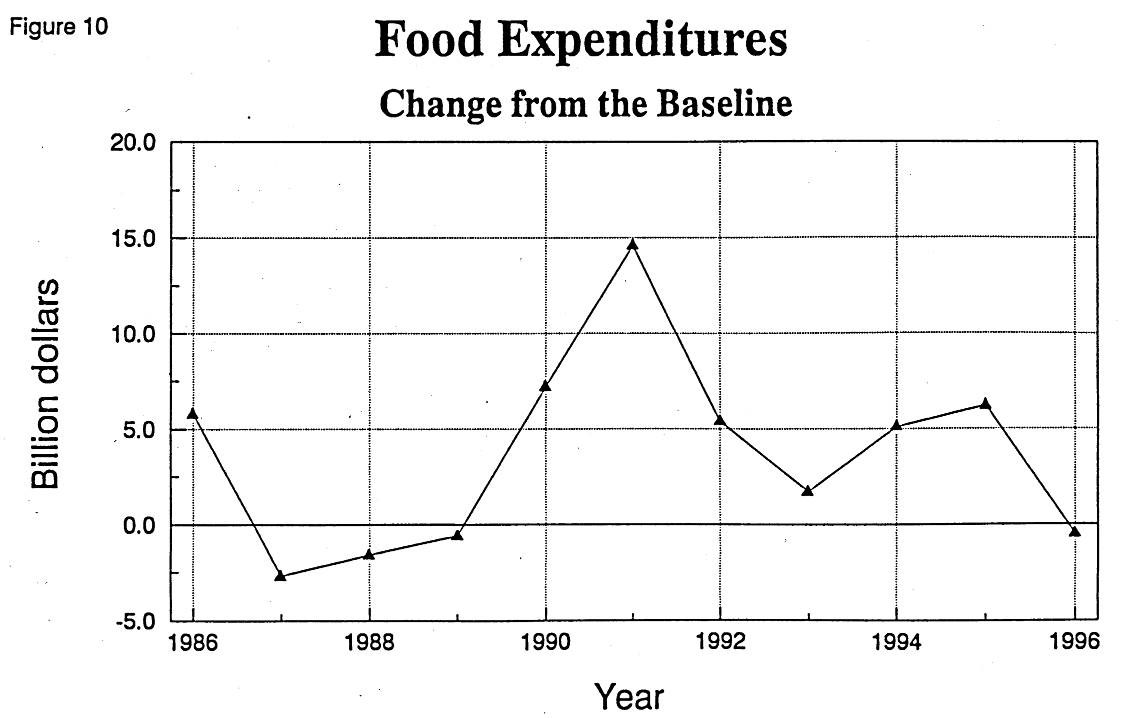


Figure 10



income varied from a high of almost $10 billion above the baseline to a low of $7 billion below the baseline.

Government Costs

Government spending was much lower under the reduced stock scenario since stocks were prevented from accumulating and producer loans were required to be either repaid at lower rates or forfeited. Most of this lower spending was due to lower outlays for 9-month loans in response to the drop in loan rates in 1985/86 and lower outlays on deficiency payments after the drought due to higher crop prices. The reduced stock scenario effectively moved stocks out of government controls and prevented new entry into the FOR.

Net stock outlays fell $5 and $4 billion in FY86 and FY87 due to lower loan placements, no loan extensions, and no entry into the FOR. Net stock outlays fell a further $1.8 billion in FY88 due to higher market prices. The lower market prices caused by reduced loan rates increased deficiency payment rates for the 1985/86 crops but increased ARP and PLD rates reduced the number of acres eligible for deficiency payments. Spending on deficiency payments fell $6 billion over FY88-FY90 due to higher market prices. Thereafter government spending averaged just below the baseline.

Summary and Conclusions

This analysis investigated the relative changes which might have occurred in the food and agricultural sectors had the U.S. government not accumulated the reserve of grain stocks that it did. A scenario was developed which reduced government stocks to zero and total stocks to 2.3 billion bushels by the end of crop year 1987/88 (i.e., preceding the harvest period of the 1988 drought). Comparisons were made with actual observations over the 1986-1989 period and with the FAPRI March 1990 baseline over the projection period 1990-1996. Thus the analysis extended eight years beyond 1988 in order to develop a clearer understanding of the drought effects on the livestock sector. This time period is long enough to measure the major dynamic ramifications of a significant shock on the livestock industry, which has limited response capabilities due to biological lags.

Preceding the 1988 drought, actual carry-in corn stocks were 4.3 billion bushels. The reduced stock scenario was developed to reduce corn stocks toward the two billion bushel level. Thus the government program was modified to reduce loan rates in 1985, increase acreage reduction programs and paid land diversion, and not allow entry of stocks into the Farmer-owned Reserve. These modifications allowed corn stocks to fall to 2.3 billion bushels preceding the drought.

As expected, a drought of the magnitude of the one in 1988 had a strong impact on the livestock sector. Under the baseline scenario, this negative impact of higher feed prices was softened substantially due to a relatively large amount of stocks of feed grains on hand. The actual corn price rose to an average of only $2.54 per bushel for crop year 1988/89 under the baseline compared to an almost $3.60 corn price under the reduced stock scenario.

The beef and pork sector responded with an immediate reduction in the breeding herd under the reduced stock scenario. This led to increased beef production in 1989 and lower prices. In 1990 and 1991, meat production was sharply lower causing farm and retail prices to rise. Beef production continued lower through 1996 due to the slow biological response to higher prices.

Large declines in producer net returns relative to the baseline were projected for the beef and hog industries in 1989 and sustained for beef in 1990. While overall post-drought returns for all livestock commodities were higher under the reduced stock scenario, variances of these returns were much higher adding a strong element of risk of unstable prices to these industries.

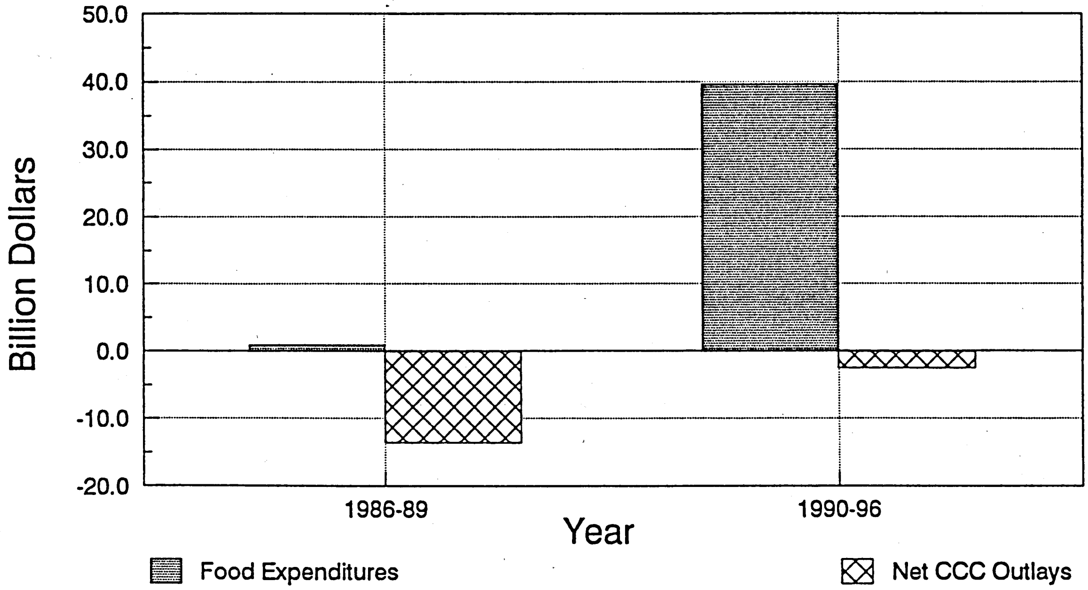
Under the reduced stock scenario, consumers faced higher prices after the initial beef sell-off period and spend substantially more on food as a result. Because of the differences in percentage of disposable income spent on food across poor to wealthy families, it is important to note that low income households would be at a substantially greater disadvantage due to higher food prices than high income families.

Thus, the analysis shows that a modified program that tightened up total stock levels going into 1988 could have saved the government $15 billion from 1986-90 relative to the actual management of the FSA85 but has very likely saved consumers a downstream cost of $40 billion which was never felt because of the unusually high levels of stocks prior to the 1988 drought (Figure 11). Government spending on a stocks program significantly cushioned the impact of the drought on consumers. Had stocks been lower, the one year shock in crop prices would have had even greater effects on livestock and meat prices and consumer expenditures.

Figure 11

Food Expenditures vs. Net CCC Outlays

Total Change from the Baseline



Appendix A--Impact Tables

- Corn
- Sorghum
- Wheat
- Soybeans
- Livestock Production
- Livestock Farm Prices
- Livestock Returns
- Retail Meat Prices
- Consumer Expenditures
- Receipts, Expenses, and Income
- Government Costs

Table A.1. CORN: Impacts of Reduced Grain Stocks Scenario

Variable/Year	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	94/95	95/96
					(Million Bushels)							
PRODUCTION												
Baseline	7,674	8,877	8,250	7,131	4,929	7,527	8,174	8,153	8,361	8,448	8,581	8,772
Reduced Stocks	7,674	8,086	7,217	7,128	4,985	7,795	8,276	8,105	8,369	8,444	8,599	8,810
Difference	0	-791	-1033	-4	57	268	102	-48	8	-3	17	38
% Difference	0.0%	-8.9%	-12.5%	-0.0%	1.2%	3.6%	1.2%	-0.6%	0.1%	-0.0%	0.2%	0.4%
FEED USE												
Baseline	4,079	4,095	4,714	4,797	3,957	4,408	4,539	4,673	4,678	4,644	4,653	4,695
Reduced Stocks	4,063	4,252	4,711	4,700	3,503	4,291	4,556	4,701	4,653	4,650	4,673	4,713
Difference	-16	156	-2	-97	-454	-117	17	28	-25	7	21	18
% Difference	-0.4%	3.8%	-0.0%	-2.0%	-11.5%	-2.7%	0.4%	0.6%	-0.5%	0.1%	0.5%	0.4%
EXPORTS												
Baseline	1,865	1,241	1,504	1,732	2,060	2,137	2,171	2,155	2,259	2,384	2,497	2,622
Reduced Stocks	1,856	1,333	1,518	1,696	1,689	1,952	2,103	2,138	2,262	2,376	2,484	2,616
Difference	-9	92	13	-36	-371	-185	-68	-17	2	-9	-12	-6
% Difference	-0.5%	7.4%	0.9%	-2.1%	-18.0%	-8.6%	-3.1%	-0.8%	0.1%	-0.4%	-0.5%	-0.2%
ENDING STOCKS												
Baseline	1,648	4,040	4,882	4,259	1,930	1,623	1,761	1,735	1,773	1,778	1,770	1,761
Reduced Stocks	1,677	3,019	2,817	2,331	921	1,190	1,479	1,394	1,463	1,467	1,469	1,487
Difference	29	-1021	-2065	-1928	-1009	-433	-283	-341	-310	-311	-301	-274
% Difference	1.7%	-25.3%	-42.3%	-45.3%	-52.3%	-26.7%	-16.0%	-19.6%	-17.5%	-17.5%	-17.0%	-15.6%
FARM PRICE					(Dollars per Bushel)							
Baseline	2.63	2.23	1.50	1.94	2.54	2.30	2.05	2.12	2.04	1.99	2.02	2.07
Reduced Stocks	2.66	1.84	1.50	2.11	3.59	2.52	2.02	2.11	2.03	2.01	2.06	2.09
Difference	0.03	-0.39	0.00	0.17	1.05	0.22	-0.03	-0.01	-0.01	0.02	0.04	0.02
% Difference	1.3%	-17.5%	0.0%	8.7%	41.3%	9.7%	-1.6%	-0.3%	-0.3%	1.2%	1.8%	0.8%

Table A.2. SORGHUM: Impacts of Reduced Grain Stocks Scenario

Variable/Year	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	94/95	95/96
					(Million Bushels)							
PRODUCTION												
Baseline	866	1,120	938	731	577	618	754	744	772	763	762	770
Reduced Stocks	866	1,005	805	726	578	672	800	731	780	758	770	780
Difference	0	-115	-133	-4	2	54	46	-13	8	-5	8	10
% Difference	0.0%	-10.3%	-14.2%	-0.6%	0.3%	8.8%	6.1%	-1.7%	1.1%	-0.7%	1.1%	1.3%
FEED USE												
Baseline	539	664	536	555	468	520	511	495	498	486	480	469
Reduced Stocks	538	650	547	583	426	469	516	473	498	478	472	465
Difference	-1	-14	11	28	-42	-51	5	-22	-1	-8	-9	-4
% Difference	-0.2%	-2.1%	2.0%	5.0%	-8.9%	-9.8%	1.0%	-4.4%	-0.2%	-1.7%	-1.8%	-0.8%
EXPORTS												
Baseline	297	178	198	231	310	244	231	246	254	266	280	293
Reduced Stocks	299	165	194	250	345	219	223	239	250	263	279	295
Difference	2	-13	-5	19	35	-25	-8	-6	-4	-3	-1	1
% Difference	0.6%	-7.1%	-2.4%	8.2%	11.2%	-10.2%	-3.6%	-2.6%	-1.4%	-1.1%	-0.3%	0.4%
ENDING STOCKS												
Baseline	300	551	743	663	440	280	277	267	273	270	258	252
Reduced Stocks	299	461	513	381	167	137	185	190	209	212	218	225
Difference	-1	-90	-230	-282	-273	-142	-93	-77	-64	-58	-40	-27
% Difference	-0.3%	-16.3%	-30.9%	-42.5%	-62.1%	-50.8%	-33.4%	-28.8%	-23.4%	-21.4%	-15.4%	-10.8%
						(Dollars per Bushel)						
FARM PRICE												
Baseline	2.32	1.93	1.37	1.70	2.27	2.10	1.88	1.95	1.92	1.91	1.94	1.99
Reduced Stocks	2.34	1.66	1.34	1.73	2.99	2.38	1.85	1.97	1.90	1.94	1.97	1.99
Difference	0.02	-0.27	-0.03	0.03	0.72	0.28	-0.03	0.02	-0.02	0.03	0.03	0.00
% Difference	0.9%	-14.0%	-1.9%	1.6%	31.9%	13.3%	-1.8%	1.1%	-0.9%	1.3%	1.5%	0.3%

Table A.3. WHEAT: Impacts of Reduced Grain Stocks Scenario

Variable/Year	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	94/95	95/96
					(Million Bushels)							
PRODUCTION												
Baseline	2,595	2,425	2,092	2,108	1,812	2,036	2,607	2,540	2,566	2,633	2,616	2,648
Reduced Stocks	2,595	2,425	1,919	2,107	1,848	2,098	2,665	2,573	2,502	2,629	2,632	2,653
Difference	0	-0	-173	-1	36	62	58	33	-64	-4	16	5
% Difference	0.0%	-0.0%	-8.3%	-0.0%	2.0%	3.1%	2.2%	1.3%	-2.5%	-0.1%	0.6%	0.2%
FEED USE												
Baseline	405	279	412	280	137	146	157	174	170	174	174	172
Reduced Stocks	406	297	413	280	123	112	138	174	166	165	165	169
Difference	1	18	1	-0	-14	-34	-18	-0	-4	-9	-9	-3
% Difference	0.1%	6.5%	0.3%	-0.0%	-10.2%	-23.6%	-11.8%	-0.1%	-2.3%	-5.1%	-5.0%	-1.6%
EXPORTS												
Baseline	1,424	915	1,004	1,598	1,419	1,258	1,424	1,483	1,508	1,562	1,581	1,605
Reduced Stocks	1,424	1,004	1,056	1,639	1,355	1,197	1,403	1,474	1,499	1,563	1,598	1,612
Difference	0	89	53	41	-64	-61	-21	-9	-9	1	17	7
% Difference	0.0%	9.7%	5.3%	2.5%	-4.5%	-4.9%	-1.5%	-0.6%	-0.6%	0.0%	1.0%	0.4%
ENDING STOCKS												
Baseline	1,425	1,905	1,821	1,261	702	505	693	729	759	789	775	762
Reduced Stocks	1,424	1,800	1,489	887	445	406	691	771	750	785	778	766
Difference	-1	-105	-332	-374	-257	-99	-2	42	-9	-5	3	4
% Difference	-0.1%	-5.5%	-18.2%	-29.6%	-36.6%	-19.5%	-0.3%	5.7%	-1.2%	-0.6%	0.4%	0.6%
FARM PRICE					(Dollars per Bushel)							
Baseline	3.39	3.08	2.42	2.57	3.72	3.81	3.23	3.18	3.35	3.27	3.36	3.53
Reduced Stocks	3.39	2.40	2.42	2.71	4.49	4.19	3.32	3.01	3.33	3.33	3.38	3.51
Difference	0.00	-0.68	0.00	0.14	0.77	0.37	0.09	-0.17	-0.02	0.06	0.02	-0.02
% Difference	0.1%	-22.2%	0.0%	5.4%	20.7%	9.8%	2.9%	-5.5%	-0.5%	1.7%	0.7%	-0.7%

Table A.4. SOYBEANS: Impacts of Reduced Grain Stocks Scenario

Variable/Year	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	94/95	95/96
					(Million Bushels)							
PRODUCTION												
Baseline	1,861	2,099	1,940	1,938	1,549	1,927	1,943	1,915	1,978	2,053	2,072	2,125
Reduced Stocks	1,861	2,115	1,972	1,954	1,518	1,764	1,940	1,959	1,967	2,040	2,085	2,135
Difference	0	16	32	15	-31	-163	-3	44	-11	-12	13	10
% Difference	0.0%	0.8%	1.6%	0.8%	-2.0%	-8.5%	-0.2%	2.3%	-0.6%	-0.6%	0.6%	0.5%
FEED USE												
Baseline	1,030	1,053	1,179	1,174	1,058	1,110	1,167	1,183	1,198	1,228	1,254	1,278
Reduced Stocks	1,029	1,066	1,179	1,181	1,051	1,073	1,150	1,188	1,200	1,230	1,260	1,282
Difference	-1	13	0	7	-7	-37	-16	5	2	1	6	5
% Difference	-0.1%	1.2%	0.0%	0.6%	-0.7%	-3.3%	-1.4%	0.4%	0.2%	0.1%	0.5%	0.4%
EXPORTS												
Baseline	598	740	757	802	527	590	644	672	681	697	720	742
Reduced Stocks	599	753	759	818	518	522	610	683	685	690	719	745
Difference	1	13	2	16	-9	-68	-35	11	5	-7	-1	3
% Difference	0.2%	1.8%	0.2%	2.0%	-1.7%	-11.5%	-5.4%	1.6%	0.7%	-1.0%	-0.2%	0.4%
ENDING STOCKS												
Baseline	316	536	436	302	182	314	350	312	311	338	333	334
Reduced Stocks	316	524	454	313	182	255	338	329	311	331	334	337
Difference	-0	-12	18	11	0	-59	-12	17	-0	-7	1	4
% Difference	-0.1%	-2.2%	4.2%	3.7%	0.0%	-18.7%	-3.3%	5.5%	-0.1%	-2.2%	0.4%	1.1%
FARM PRICE					(Dollars per Bushel)							
Baseline	5.84	5.05	4.78	5.88	7.35	5.58	5.02	5.82	6.03	5.45	5.70	6.01
Reduced Stocks	5.80	4.85	4.75	5.52	7.58	7.03	5.58	5.37	5.93	5.74	5.79	5.91
Difference	-0.04	-0.20	-0.03	-0.36	0.23	1.45	0.56	-0.45	-0.10	0.29	0.09	-0.10
% Difference	-0.7%	-4.0%	-0.6%	-6.1%	3.1%	26.0%	11.2%	-7.7%	-1.7%	5.3%	1.6%	-1.7%

Table A.5. Livestock Production: Impacts of Reduced Grain Stocks Scenario

Variable/Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Ave 89-96	Ave 85-88
						(Million Pounds)								
BEEF														
Baseline	23,728	24,371	23,594	23,528	23,015	22,723	22,955	23,363	23,817	24,025	24,036	23,775	23,464	23,805
Reduced Stocks	23,709	23,444	23,743	23,747	23,761	23,379	22,495	22,516	22,898	23,203	23,538	23,549	23,167	23,661
Difference	-19	-927	149	219	745	656	-461	-847	-919	-822	-498	-226	-296	-145
% Difference	-0.1%	-3.8%	0.6%	0.9%	3.2%	2.9%	-2.0%	-3.6%	-3.9%	-3.4%	-2.1%	-0.9%	-1.26%	-0.61%
PORK														
Baseline	14,807	14,063	14,381	15,625	15,825	15,591	15,884	16,357	15,924	15,426	15,178	15,487	15,709	14,719
Reduced Stocks	14,887	13,975	14,511	15,680	15,536	14,106	14,682	16,449	16,484	15,582	14,936	15,451	15,403	14,763
Difference	80	-88	130	55	-289	-1486	-1203	91	560	157	-242	-36	-306	44
% Difference	0.5%	-0.6%	0.9%	0.4%	-1.8%	-9.5%	-7.6%	0.6%	3.5%	1.0%	-1.6%	-0.2%	-1.95%	0.30%
BROILER														
Baseline	13,762	14,316	15,581	16,171	17,236	18,392	18,560	18,775	18,976	19,362	19,666	20,020	18,874	14,957
Reduced Stocks	13,768	14,598	15,627	16,116	16,655	18,171	18,564	19,163	19,350	19,725	20,030	20,375	19,004	15,027
Difference	6	282	46	-55	-581	-221	4	388	374	363	364	355	131	70
% Difference	0.0%	2.0%	0.3%	-0.3%	-3.4%	-1.2%	0.0%	2.1%	2.0%	1.9%	1.8%	1.8%	0.69%	0.47%

Table A.6. Livestock Farm Prices: Impacts of Reduced Grain Stocks Scenario

Variable/Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Ave 89-96	Ave 85-88
						(Dollars per Cwt)								
OMAHA 900-1100# STEER PRICE														
Baseline	58.37	57.75	63.05	69.56	72.63	74.09	72.93	71.45	70.19	69.21	71.77	73.09	71.92	62.18
Reduced Stocks	58.25	66.10	61.01	67.08	67.99	73.63	84.87	79.92	76.80	76.16	76.52	73.03	76.11	63.11
Difference	-0.12	8.35	-2.05	-2.49	-4.64	-0.45	11.93	8.47	6.61	6.95	4.74	-0.06	4.19	0.92
% Difference	-0.2%	14.5%	-3.2%	-3.6%	-6.4%	-0.6%	16.4%	11.9%	9.4%	10.0%	6.6%	-0.1%	5.83%	1.49%
K.C. 600-700# FEEDER STEER PRICE														
Baseline	64.56	62.79	73.67	83.89	86.64	88.00	86.39	83.19	81.14	80.02	81.91	82.93	83.78	71.23
Reduced Stocks	64.59	75.97	71.29	80.82	72.63	85.24	100.38	93.60	89.54	88.28	87.21	82.79	87.46	73.17
Difference	0.03	13.18	-2.38	-3.07	-14.01	-2.76	13.99	10.41	8.40	8.26	5.29	-0.14	3.68	1.94
% Difference	0.0%	21.0%	-3.2%	-3.7%	-16.2%	-3.1%	16.2%	12.5%	10.4%	10.3%	6.5%	-0.2%	4.39%	2.72%
7-MARKET BARROW & GILT PRICE														
Baseline	44.77	51.19	51.20	43.54	44.23	45.90	44.94	41.87	44.48	47.61	50.53	49.34	46.11	47.67
Reduced Stocks	44.26	53.88	49.51	42.68	45.78	60.59	59.33	42.97	41.31	47.65	53.93	49.42	50.12	47.58
Difference	-0.51	2.69	-1.68	-0.85	1.55	14.69	14.39	1.10	-3.17	0.03	3.40	0.08	4.01	-0.09
% Difference	-1.1%	5.2%	-3.3%	-2.0%	3.5%	32.0%	32.0%	2.6%	-7.1%	0.1%	6.7%	0.2%	8.70%	-0.19%
12 CITY BROILER PRICE														
Baseline	50.80	56.90	45.83	56.30	59.05	54.62	57.17	56.99	58.92	57.31	58.65	59.77	57.81	52.46
Reduced Stocks	50.53	58.62	44.10	55.72	62.48	60.88	65.68	56.77	56.58	56.11	57.68	56.09	59.03	52.24
Difference	-0.27	1.72	-1.73	-0.58	3.42	6.26	8.51	-0.21	-2.35	-1.20	-0.98	-3.68	1.22	-0.22
% Difference	-0.5%	3.0%	-3.8%	-1.0%	5.8%	11.5%	14.9%	-0.4%	-4.0%	-2.1%	-1.7%	-6.2%	2.12%	-0.41%

Table A.7. Livestock Returns: Impacts of Reduced Grain Stocks Scenario

Variable/Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Ave 89-96	Ave 85-88
						(Dollars per Cow)								
COW-CALF RETURNS														
Baseline	-59.65	-40.04	26.23	27.62	-0.98	18.07	23.28	3.88	-1.13	-3.93	-2.46	-5.30	3.93	-11.46
Reduced Stocks	-58.92	21.19	18.88	10.12	-95.55	-4.75	66.77	37.73	23.53	19.53	12.95	-5.77	6.80	-2.18
Difference	0.74	61.23	-7.35	-17.50	-94.57	-22.82	43.50	33.85	24.66	23.46	15.41	-0.47	2.88	9.28
						(Dollars per Head)								
FEEDLOT RETURNS														
Baseline	-36.57	-4.39	26.22	-9.58	-39.67	-11.11	3.85	-2.26	0.81	1.26	11.61	12.82	-2.84	-6.08
Reduced Stocks	-37.04	25.18	20.06	-25.74	-66.97	-17.77	38.99	21.73	13.76	17.39	25.58	13.03	5.72	-4.39
Difference	-0.48	29.56	-6.17	-16.16	-27.30	-6.66	35.14	23.99	12.95	16.12	13.98	0.21	8.55	1.69
						(Dollars per Head)								
FARROW TO FINISH RETURNS														
Baseline	6.98	26.79	35.88	7.17	-3.25	6.49	7.94	-3.81	0.82	7.46	10.36	4.11	3.77	19.21
Reduced Stocks	6.22	38.02	32.51	3.64	-15.65	31.83	37.62	-1.01	-7.00	5.73	16.83	4.46	9.10	20.10
Difference	-0.76	11.22	-3.38	-3.52	-12.40	25.34	29.68	2.80	-7.82	-1.73	6.47	0.35	5.34	0.89
						(Cents per Pound)								
BROILER RETURNS														
Baseline	5.24	11.01	1.75	7.09	6.46	4.92	8.78	6.25	7.63	6.32	6.33	6.05	6.59	6.27
Reduced Stocks	5.12	14.00	0.16	6.42	5.98	8.66	16.66	6.34	4.84	4.20	5.04	2.54	6.78	6.43
Difference	-0.11	2.99	-1.59	-0.67	-0.48	3.74	7.88	0.09	-2.80	-2.11	-1.29	-3.51	0.19	0.15

Table A.8. Retail Meat Prices: Impacts of Reduced Grain Stocks Scenario

Variable/Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Ave 89-96	Ave 85-88
BEEF RETAIL PRICE						(Dollars per Pound)								
Baseline	2.33	2.31	2.42	2.55	2.70	2.74	2.73	2.70	2.67	2.65	2.70	2.73	2.70	2.40
Reduced Stocks	2.33	2.51	2.36	2.50	2.61	2.77	3.04	2.88	2.81	2.80	2.80	2.72	2.80	2.42
Difference	-0.00	0.20	-0.06	-0.05	-0.09	0.03	0.31	0.18	0.14	0.15	0.10	-0.01	0.10	0.02
% Difference	-0.2%	8.8%	-2.5%	-1.9%	-3.3%	1.0%	11.3%	6.8%	5.1%	5.7%	3.9%	-0.4%	3.74%	0.95%
PORK RETAIL PRICE						(Dollars per Pound)								
Baseline	1.62	1.78	1.86	1.83	1.83	1.86	1.84	1.81	1.84	1.89	1.94	1.92	1.87	1.77
Reduced Stocks	1.61	1.87	1.82	1.80	1.83	2.10	2.16	1.87	1.81	1.93	2.02	1.92	1.96	1.78
Difference	-0.01	0.10	-0.04	-0.03	0.01	0.24	0.32	0.06	-0.03	0.04	0.09	-0.01	0.09	0.00
% Difference	-0.7%	5.4%	-2.4%	-1.4%	0.4%	13.0%	17.4%	3.4%	-1.4%	2.0%	4.4%	-0.3%	4.87%	0.21%
BROILER RETAIL PRICE						(Cents per Pound)								
Baseline	76.30	83.50	76.67	85.39	92.07	85.03	87.20	88.01	89.18	88.74	89.56	91.31	88.89	80.46
Reduced Stocks	75.99	85.75	74.70	84.67	95.45	92.07	97.09	88.20	86.89	87.78	88.88	87.50	90.48	80.28
Difference	-0.31	2.25	-1.97	-0.72	3.38	7.04	9.89	0.18	-2.29	-0.96	-0.68	-3.81	1.59	-0.19
% Difference	-0.4%	2.7%	-2.6%	-0.8%	3.7%	8.3%	11.3%	0.2%	-2.6%	-1.1%	-0.8%	-4.2%	1.79%	-0.23%
CPI for MEAT						(Index, 1982-84=100)								
Baseline	100.1	104.5	110.5	114.3	121.3	122.5	124.0	124.8	126.8	129.9	133.0	135.9	127.28	107.35
Reduced Stocks	99.9	109.0	108.5	113.1	120.6	127.6	134.6	128.7	128.0	133.4	137.0	135.5	130.68	107.63
Difference	-0.2	4.5	-2.0	-1.2	-0.7	5.1	10.6	3.9	1.2	3.5	4.0	-0.4	3.40	0.28
% Difference	-0.2%	4.3%	-1.8%	-1.0%	-0.6%	4.2%	8.5%	3.1%	0.9%	2.7%	3.0%	-0.3%	2.67%	0.26%
CPI for FOOD						(Index, 1982-84=100)								
Baseline	105.6	108.9	113.5	118.3	125.3	128.9	132.7	136.4	140.5	145.2	149.4	153.4	138.98	111.58
Reduced Stocks	105.5	110.5	112.8	117.9	125.1	130.8	136.4	137.7	140.9	146.4	150.9	153.2	140.18	111.68
Difference	-0.1	1.6	-0.7	-0.4	-0.2	1.9	3.7	1.3	0.4	1.2	1.5	-0.2	1.20	0.10
% Difference	-0.1%	1.5%	-0.6%	-0.3%	-0.2%	1.5%	2.8%	1.0%	0.3%	0.8%	1.0%	-0.1%	0.86%	0.09%

Table A.9. Consumer Expenditures: Impacts of Reduced Grain Stocks Scenario

Variable/Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Ave 89-96	Ave 85-88
						(Dollars per Person)								
MEAT EXPENDITURES /1														
Baseline	340.3	347.5	350.3	368.1	374.4	369.3	371.9	371.7	370.2	366.9	369.7	371.3	370.67	351.56
Reduced Stocks	339.4	364.2	343.9	364.1	372.5	384.4	407.4	383.5	374.1	374.9	377.0	366.4	380.03	352.93
Difference	-0.84	16.71	-6.39	-4.01	-1.93	15.13	35.51	11.81	3.93	8.01	7.34	-4.90	9.36	1.37
% Difference	-0.2%	4.8%	-1.8%	-1.1%	-0.5%	4.1%	9.5%	3.2%	1.1%	2.2%	2.0%	-1.3%	2.53%	0.39%
						(Billion Dollars)								
FOOD EXPENDITURES														
Baseline	406.8	427.5	453.1	479.3	515.6	537.7	561.1	586.7	612.8	642.5	671.0	699.1	603.31	441.68
Reduced Stocks	406.5	433.3	450.4	477.7	515.1	544.9	575.7	592.1	614.5	647.6	677.1	698.6	608.20	441.98
Difference	-0.30	5.80	-2.70	-1.60	-0.50	7.20	14.60	5.40	1.70	5.10	6.10	-0.50	4.89	0.30
% Difference	-0.1%	1.4%	-0.6%	-0.3%	-0.1%	1.3%	2.6%	0.9%	0.3%	0.8%	0.9%	-0.1%	0.81%	0.07%

/1 - Beef, Pork, Broiler, & Turkey

Table A.10. RECEIPTS, EXPENSES, & INCOME: Impacts of Reduced Grain Stocks Scenario

Variable/Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
						(Billion Dollars)						
CROP RECEIPTS												
Baseline	74.29	64.01	63.75	72.57	74.76	76.26	78.82	82.30	83.62	85.83	89.63	93.13
Reduced Stocks	70.32	59.86	63.00	75.83	78.64	79.10	78.41	81.64	84.07	86.53	89.82	93.20
Difference	-3.97	-4.14	-0.75	3.26	3.89	2.84	-0.41	-0.66	0.45	0.70	0.19	0.07
% Difference	-5.3%	-6.5%	-1.2%	4.5%	5.2%	3.7%	-0.5%	-0.8%	0.5%	0.8%	0.2%	0.1%
LIVESTOCK RECEIPTS												
Baseline	69.84	71.53	75.72	78.86	82.84	82.57	82.10	81.03	81.05	81.17	83.89	85.89
Reduced Stocks	69.68	77.03	74.13	76.84	79.31	85.42	91.50	85.07	83.04	84.14	86.75	85.37
Difference	-0.16	5.49	-1.59	-2.02	-3.52	2.85	9.40	4.05	1.99	2.97	2.86	-0.52
% Difference	-0.2%	7.7%	-2.1%	-2.6%	-4.3%	3.4%	11.4%	5.0%	2.5%	3.7%	3.4%	-0.6%
PRODUCTION EXPENSES												
Baseline	133.96	122.39	128.00	134.97	141.45	141.84	142.86	146.75	150.48	154.12	160.27	166.12
Reduced Stocks	131.33	121.01	127.44	133.43	138.66	142.22	145.40	148.16	151.83	156.10	161.77	166.23
Difference	-2.62	-1.37	-0.56	-1.54	-2.79	0.38	2.54	1.41	1.34	1.97	1.50	0.10
% Difference	-2.0%	-1.1%	-0.4%	-1.1%	-2.0%	0.3%	1.8%	1.0%	0.9%	1.3%	0.9%	0.1%
NET CASH INCOME												
Baseline	46.70	51.80	54.49	57.19	53.48	52.91	55.24	54.58	53.77	53.29	53.89	53.84
Reduced Stocks	45.19	57.06	51.03	56.20	53.21	56.54	61.81	56.65	54.63	54.63	55.21	53.16
Difference	-1.51	5.26	-3.46	-0.99	-0.28	3.63	6.56	2.07	0.87	1.35	1.32	-0.69
% Difference	-3.2%	10.2%	-6.4%	-1.7%	-0.5%	6.9%	11.9%	3.8%	1.6%	2.5%	2.4%	-1.3%
NET FARM INCOME												
Baseline	32.41	38.03	43.63	42.66	48.02	43.90	44.48	43.36	41.62	40.93	42.25	40.83
Reduced Stocks	26.88	48.33	36.46	42.67	49.35	50.27	53.25	45.23	41.40	41.71	42.02	38.21
Difference	-5.53	10.30	-7.16	0.02	1.33	6.37	8.76	1.86	-0.22	0.78	-0.22	-2.62
% Difference	-17.1%	27.1%	-16.4%	0.0%	2.8%	14.5%	19.7%	4.3%	-0.5%	1.9%	-0.5%	-6.4%

Table A.11. GOVERNMENT COSTS: Impacts of Reduced Grain Stocks Scenario

Variable/Year	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
					(Million Dollars, CCC Accounting)						
NET CCC OUTLAYS											
Baseline	25,841	22,408	12,461	10,534	7,165	10,347	10,715	10,542	10,630	9,646	8,492
Reduced Stocks	22,625	17,717	9,248	8,184	5,911	10,421	11,021	10,460	9,884	9,082	8,253
Difference	-3,216	-4,691	-3,213	-2,350	-1,254	74	306	-82	-746	-564	-239
% Difference	-12.4%	-20.9%	-25.8%	-22.3%	-17.5%	0.7%	2.9%	-0.8%	-7.0%	-5.8%	-2.8%
CCC STORAGE & HANDLING											
Baseline	774	1,427	1,029	601	405	362	312	277	260	240	221
Reduced Stocks	703	846	321	131	66	78	70	68	68	66	66
Difference	-71	-581	-708	-470	-339	-284	-242	-209	-192	-174	-155
% Difference	-9.2%	-40.7%	-68.8%	-78.2%	-83.7%	-78.5%	-77.6%	-75.5%	-73.8%	-72.5%	-70.1%
PRODUCER STORAGE PYMTS.											
Baseline	485	832	658	341	172	76	68	82	82	81	81
Reduced Stocks	441	594	230	0	0	0	0	0	0	0	0
Difference	-44	-238	-428	-341	-172	-76	-68	-82	-82	-81	-81
% Difference	-9.1%	-28.6%	-65.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%	-100.0%
TOTAL DEFICIENCY PYMTS.											
Baseline	6,166	4,891	3,971	5,780	4,455	7,374	8,009	7,977	7,936	7,217	6,336
Reduced Stocks	8,384	4,721	2,828	2,361	2,922	7,126	8,297	8,000	7,632	6,951	6,275
Difference	2,218	-170	-1,143	-3,419	-1,533	-248	288	23	-304	-266	-61
% Difference	36.0%	-3.5%	-28.8%	-59.2%	-34.4%	-3.4%	3.6%	0.3%	-3.8%	-3.7%	-1.0%
NET STOCK OUTLAYS											
Baseline	15,539	14,456	7,143	231	1,059	1,128	800	620	705	547	334
Reduced Stocks	10,431	10,408	5,346	668	868	1,052	621	455	316	288	206
Difference	-5,108	-4,048	-1,797	437	-191	-76	-179	-165	-389	-259	-128
% Difference	-32.9%	-28.0%	-25.2%	189.2%	-18.0%	-6.7%	-22.4%	-26.6%	-55.2%	-47.3%	-38.3%
TOTAL PYMTS. & SUBSIDIES*											
Baseline	11,813	16,747	14,480	10,755	8,645	9,815	9,958	10,071	9,892	9,028	8,252
Reduced Stocks	14,654	15,325	11,137	7,621	7,075	9,865	10,045	9,878	9,526	8,749	8,093
Difference	2,841	-1,422	-3,343	-3,134	-1,570	50	87	-193	-366	-279	-159
% Difference	24.0%	-8.5%	-23.1%	-29.1%	-18.2%	0.5%	0.9%	-1.9%	-3.7%	-3.1%	-1.9%

* Calendar year basis