

**CASH FARM INCOME, 1983-88:
A PERIOD OF PHENOMENAL GROWTH**

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Financial stress dominated the national perception of the U.S. farm sector during the early and mid 1980s. Net cash income for the sector increased only by \$3.5 billion between 1979 and 1983 while average U.S. land prices declined by 33.5 percent between 1982 and 1987. A sharp increase in farm bankruptcies ensued.

By the late 1980s, a different picture has emerged. Net cash farm income grew by \$20.3 billion between 1983 and 1988 (Table 1), the largest nominal increase over five years on record. U.S. farm land prices have increased by 9 percent over early 1987 lows and farm bankruptcies have declined.

To understand the longer term factors behind this turn of events, it is useful to examine in detail the components of net cash farm income. The latest year for which complete and reasonably accurate data are available is 1988. The closest comparable year is 1983. Both were drought years. Both had approximately the same number of acres set-aside in government programs. Both were preceded by a year of profits in the livestock sector and low prices in the grain sector. And, both years are far enough apart so that longer term, more fundamental trends become easier to spot.

To provide a midpoint bench mark for changes over the 1983-1988 period, data for 1986 also are presented. After discussing the changes, implications for the 1990s are drawn.

Gross Cash Income

Gross cash income increased from \$150 billion in 1983 to \$172 billion in 1988, with most of the increase occurring after 1986 (Table 1). Higher crop receipts and larger government payments each accounted for nearly a quarter of the increase between 1983 and 1988. Higher livestock receipts comprised almost half of the increase.

Fruit, nut, vegetable, greenhouse, and nursery crops were responsible for most of the increase in crop receipts. In general, both prices and production of these commodities increased. A 41 percent increase in the price index for all fruits between 1983 and 1988 is notable.

Cash receipts declined for crops that receive direct income support through target prices (cotton, feed grains, rice, and wheat). However, this decline was more than offset by higher government payments. As a result, total cash income for target price crops increased.

For oil crops, cash receipts changed little over the 1983-1988 period, but they increased by 32 percent between 1986 and 1988 after declining by 21 percent between 1983 and 1986. The 1986-1988 increase primarily reflected higher soybean prices: \$4.78 per bushel in 1986 to \$7.55 per bushel in 1988. Factors contributing to the price increase included expanded demand prior to 1988 and a smaller supply because of the 1988 drought.

Broilers and turkeys accounted for the increase in livestock receipts between 1983 and 1986 while cattle and calves were responsible for most of the increase between 1986 and 1988. The increase in cattle receipts reflected higher price: from \$52.80 per hundredweight for beef cattle in 1986 to \$66.80 per hundredweight in 1988. From the farm sector

perspective, cattle and calves accounted for 37 percent of the 1986-1988 increase in total gross cash receipts.

Between 1983 and 1988, broiler and turkey production expanded by 30 and 50 percent, respectively. Prices received by farmers for broilers and turkeys increased by 16 and 2 percent, respectively. This combination of sharply higher production and higher-to-steady prices suggests a strong growth in demand.

Cash Expenses

Cash farm expenses declined by almost \$13 billion between 1983 and 1986, but then increased by approximately the same amount between 1986 and 1988 (Table 1). The decline in cash expenses between 1983 and 1986 accounted for 86 percent of the increase in net cash farm income over that period. The increase in cash expenses between 1986 and 1988 was more than offset by increases in cash receipts, leading to continued growth in net cash income.

Over the period between 1983 and 1988, fuel and oil and, especially, interest expenses declined. The lower expenditures for fuel and oil reflected 18 percent lower prices and less use. On the other hand, because average interest paid per dollar of debt remained nearly constant at around 11 percent, the \$6.2 billion decline in interest expense was almost entirely the result of declining farm debt -- from \$193 billion on December 31, 1983 to \$138 billion on December 31, 1988.

The decline in farm debt was almost evenly divided between real estate and non-real estate debt: \$28 vs. \$26 billion. The decline in both types of debt reflect a combination of debt forgiveness, farm bankruptcies, early payback, and debt avoidance. Debt avoidance has been, in part, a reflection of larger crop acreage retirement programs and the advent of advanced government deficiency payments. The latter are timed to allow farmers to use them to cash flow production expenses.

The decline in farm debt has slowed dramatically: from approximately \$20 billion in 1986 to \$12 billion in 1987 to \$5 billion in 1988 to \$2 billion in 1989. Debt may increase in the future, excluding write-offs by Farmers Home Administration, in response to more planted acres, the need to replace aging equipment and buildings, and higher land prices. Thus, future decline in interest expenses probably will depend more on lower interest rates than on smaller debt loads.

Farm origin inputs, notably feed and manufactured inputs, followed the V-shaped pattern of total cash farm expenses over the 1983-1988 period. One factor in this pattern was the prices of production inputs. In the aggregate, they declined on an index value from 152 in 1983 (1977 = 100) to 144 in 1986, but then increased to 157 in 1988. A second factor was changes in the aggregate quantity of purchased inputs. It declined by 10 percent between 1983 and 1986. In contrast, no change occurred between 1986 and 1987. (Data are not available for 1988.)

Implications for the 1990s

Three implications can be drawn for the 1990s from this analysis of the rapid growth in net cash farm income between 1983 and 1988. First, because the foundations that frame the debate on food and agricultural legislation are generally established by events which occur one or two years before the bill is passed, farm economic health is unlikely to be a

major issue in the forthcoming 1990 legislation. This conclusion, along with federal budget constraints, further implies that new initiatives which increase overall farm program spending will be difficult to legislate. In fact, cuts in farm program spending seem more likely.

The second implication concerns livestock cash receipts. Cattle prices are currently at post-1970 highs. Recent slaughter numbers suggest that the decline in the beef cow herd is probably coming to an end. Furthermore, poultry production continues to expand rapidly. These factors suggest that livestock cash receipts probably will not grow as fast in the 1990s due to downward pressure on prices from an expanding total meat supply. Increased export opportunities to East Asian countries and possibly Eastern Europe and the U.S.S.R. have the potential to offset at least some of this price pressure.

The third implication is that, while the recent substantial decline in excess farm production capacity could add to crop farm income because of a tighter supply/demand balance, net crop income may in fact decline. The Food Security Act of 1985 first lowered price support rates to expand demand, then, gradually reduced target prices (income supports) to curtail budgetary costs. For example, target prices for corn did not decline until the 1988 crop year, but will have declined 28 cents per bushel by the 1990 crop year. Full impact of the lower target prices on crop farm income will not be known until the early 1990s.

Another factor is the potential for increasing expenses because of higher input prices due to general inflation and because of higher planted acres due to lower government stocks of grain. Cash expenses for 1989 increased by \$6-7 billion compared with 1988. A continuing upswing in cash expenses at the same time that government payments are declining could create a return-cost squeeze. The result could be increased interest in low input sustainable agriculture within the crop sector.

Table 1. Net Cash Farm Income by Selected Components, U.S., 1983, 1986 and 1988.

Component	1983	1986	1988 ^a
	-----\$ Billion-----		
Net Cash Income	36.9	51.8	57.2
Gross Cash Income ^b	150.4	152.5	171.6
Crops (incl. net CCC loans) ^b	67.1	64.0	72.6
Target Price Crops	26.3	24.2	24.0
Oil Crops	13.5	10.6	14.0
Fruits and Nuts	6.1	7.2	9.0
Vegetables	8.5	8.7	10.0
Greenhouse and Nursery	4.5	5.9	7.0
Other Crops	7.7	7.4	8.6
Livestock ^b	69.4	71.5	78.9
Cattle and Calves	28.7	28.9	36.0
Dairy	18.8	17.8	18.0
Hogs	9.8	9.7	9.0
Broilers and Turkeys	6.2	8.8	9.0
Other Livestock	5.9	6.3	6.9
Government Payments	9.3	11.8	14.5
Farm Related ^c	4.5	5.1	5.7
Cash Expenses ^b	113.5	100.7	114.4
Farm Origin Inputs	33.5	28.9	38.4
Feed	21.7	16.2	22.5
Livestock	8.8	9.7	12.8
Manufactured Inputs	20.9	17.0	19.4
Fuels and Oil	7.5	4.8	5.1
Interest	21.4	16.9	15.2
Other Expenses	37.7	37.9	41.4

^a Forecast.

^b The total may not equal the sum of its components due to rounding.

^c Income from machine hire, custom work, sales of forest products, custom feeding fees, recreational activities, farm cooperative dividends, and other miscellaneous sources.

SOURCES: USDA, Agricultural Outlook, October 1989. USDA, Agricultural Income and Finance, May 1988 and August 1989.

